

Mobile Payments & Fraud Survey: 2014 Report

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Nearly half of
Merchants believe
a mobile strategy is
“Very Important” to
their growth in 2014

Executive Summary

The Mobile Payments & Fraud Survey: 2014 Report is the second annual installment of this study highlighting the growth, opportunity, obstacles, preferences and priorities identified by Merchants, Service Providers, Acquirers, Card Associations and Issuers operating in the mobile channel. This year's Mobile Payments & Fraud Survey builds on the success of last year's inaugural version by showing new trends and findings, while also providing a longitudinal perspective on how mobile has changed in only 12 months.

The data collected for this year's report show indisputably that the mobile channel has continued to grow and develop since last year's inaugural Mobile Payments & Fraud Survey. Key themes that emerged include:

- More organizations are actively supporting mobile
- Mobile is considered important to growth plans by more organizations
- Mobile represents a higher portion of overall business for organizations

Nearly two-thirds of survey respondents indicated they actively support the mobile channel today, while an additional 23% plan to support it by the end of this year. Compared to last year, a higher percentage of organizations actively support mobile today. This is especially true for Merchants with annual revenues greater than \$50 million: more than 76% of Merchants in this category actively support mobile today.

Increasingly, organizations understand how vital mobile is to their growth plans and revenue. Nearly half of Merchants believe a mobile strategy is “Very Important” to their company's growth plans. That's a 40% increase compared to Merchants who believed it was “Very Important” last year. This increased emphasis is likely because the mobile channel is growing at a much higher rate than other channels for many Merchants and other organizations. Twenty-one percent of all Merchants this year indicated they earn 20% or more of their business through the mobile sales channel—more than doubling from 10% just 12 months ago. Meanwhile, the percentage of Merchants that earn less than 5% of their business through the mobile channel fell by one quarter.

Even as the mobile channel represents an increasing share of business for organizations, it is also seen as being riskier. The number of organizations that consider the mobile channel “Somewhat Riskier” than standard web eCommerce increased from 24% to 32%, while those that say the mobile channel is “Just as Risky” fell from more than half of respondents in last year's report to 41% in this year's report.

Not only do Merchants and Service Providers see mobile as riskier than standard web eCommerce, but they also are more likely to believe the mobile channel requires additional tools for managing risk. The number of Merchants that think standard eCommerce fraud processes are enough for managing fraud risk in the mobile channel fell from 37% last year to 26% this year, while Merchants who think it requires very specialized tools nearly doubled from 17% to 32%.



Merchants continue to think making transactions easier is key to growing mobile eCommerce, but concerns about security and fraud are growing

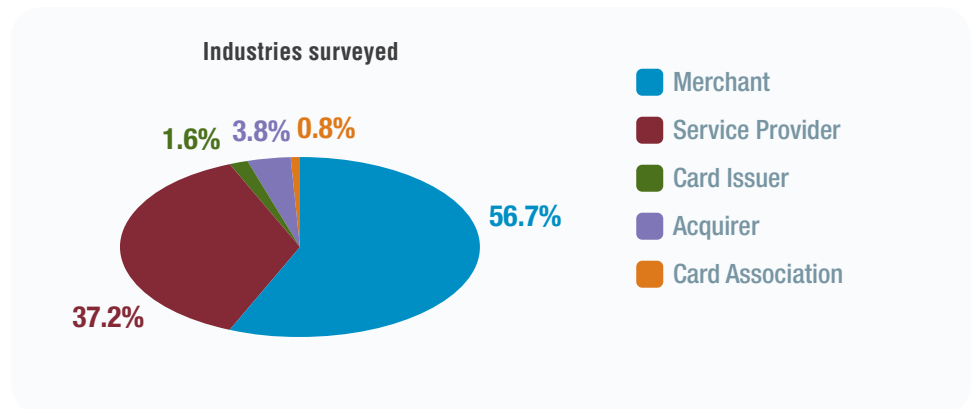
Merchants and merchant services businesses report that they are using a mix of tools, techniques and services to mitigate fraud in the mobile channel. Compared to benchmarks set last year, some changes in the tools used by organizations to prevent fraud in the mobile channel stand out. Device Identification, ID Authentication, Mobile Geolocation, NFC, Telephone Number Identification and Text Messaging all saw increased usage. And several fraud-prevention tools actually lost favor since our inaugural report. AVS use declined 47% year-to-year, while the use of Complete Fraud Platforms and Modeling each declined by about one-third. Meanwhile the tools that the most Merchants are planning to add in 2014 are a Complete Fraud Platform (24%), Device Identification (16%) and ID Authentication (15%).

In both years of the report, respondents have found the biggest obstacle to mobile adoption is the ease with which consumers can—or can't—transact. Perhaps due to negative publicity around recent network security breaches at major retailers, there is much more focus on security and fraud this year, which may account for the reduced number of respondents that cited “Making it easier to transact,” which fell from 36% to 28%. Meanwhile, the number of respondents who believe fraud risk and consumer security concerns are the biggest obstacles each grew by more than 40%.

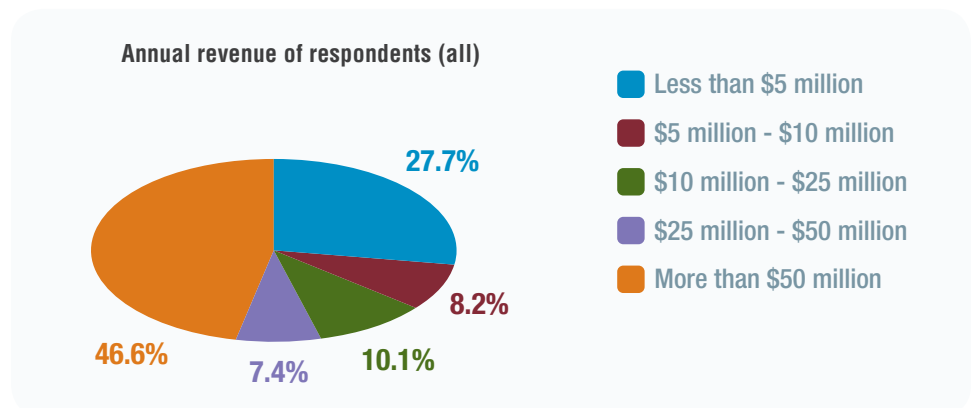
With fraud risk in the mobile channel garnering more attention this year, it makes sense that a significantly higher proportion of Merchants now believe it is “Very Important” to be able to detect when transactions are coming from a mobile device. Additionally, the share of Merchants that were undecided or “Neutral” on the subject fell sharply from 14% of Merchants last year to 2% this year. Whether or not Merchants are actually able to recognize transactions coming from mobile devices, however, is another story. The Mobile Payments & Fraud Survey found the vast majority of Merchants think it's important to know if a transaction is coming from a mobile device, but only half have the ability to determine that today.

Survey Respondents

In this second edition of the Mobile Payments & Fraud Survey, nearly 2,000 payments and/or fraud professionals were polled. These respondents represented a variety of organizations within the payments ecosystem, including Merchants, Service Providers, Acquirers, Card Associations and Issuers.



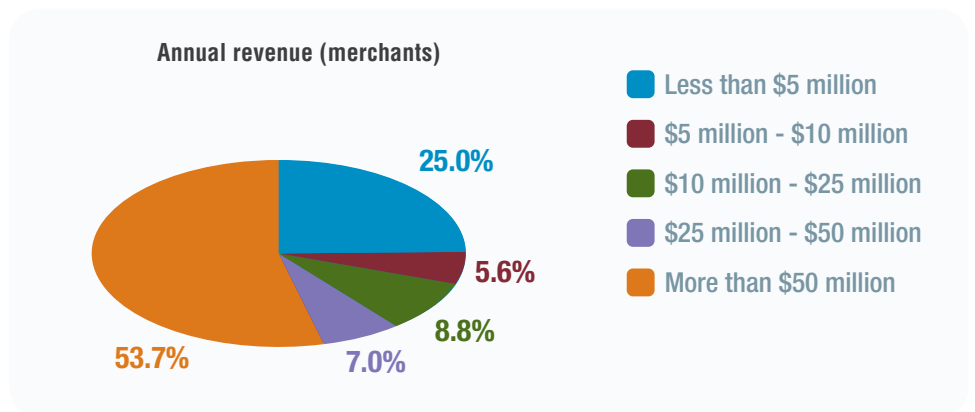
Survey respondents represented organizations of all sizes. Of those polled, 28% work for organizations earning annual revenues of less than \$5 million and 47% said their companies earned more than \$50 million per year in revenue. The organizations between these two extremes accounted for the remaining 25% of the survey population.



| Annual revenue | Acquirer | Card Association | Card Issuer | Merchant | Service Provider |
|------------------|----------|------------------|-------------|----------|------------------|
| Less than \$5MM | 20.0% | 0% | 5.9% | 25.0% | 34.6% |
| \$5MM - \$10MM | 8.6% | 37.5% | 0% | 5.6% | 12.6% |
| \$10MM - \$25MM | 20.0% | 12.5% | 17.6% | 8.8% | 11.3% |
| \$25MM - \$50MM | 2.9% | 0% | 5.9% | 7.0% | 8.7% |
| More than \$50MM | 48.6% | 50% | 70.6% | 53.7% | 32.8% |

Merchants

The distribution of Merchants by revenue in the Mobile Payments & Fraud Survey is consistent with the distribution of respondents overall. Twenty-five percent of Merchant respondents have annual revenues below \$5 million, 54% report annual revenues greater than \$50 million and 21% fall somewhere in between.



Like last year, Merchant respondents sell a wide array of goods and services online. Categories include Apparel and Accessories, Computers and Electronics, Housewares, Digital Goods and many more.

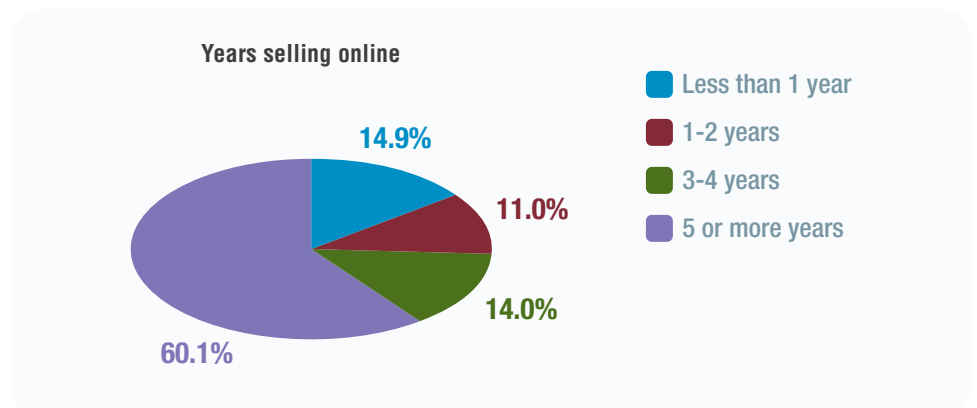
Type of goods/services sold online

| | 2012 | 2013 |
|-----------------------------|-------|-------|
| Apparel/Accessories | 30.8% | 46.3% |
| Housewares/Home Furnishings | 16.7% | 24.5% |
| Food/Drug | 16.0% | 14.6% |
| Books/Music/Video | 14.7% | 15.2% |
| Hardware/Home Improvement | 14.1% | 16.4% |
| Health/Beauty | 14.1% | 19.7% |
| Specialty/Non-Apparel | 14.1% | 15.8% |
| Toys/Hobbies | 14.1% | 15.2% |
| Computer/Electronics | 13.5% | 20.6% |
| Jewelry | 13.5% | 19.7% |
| Sporting Goods | 12.2% | 14.0% |
| Office Supplies | 10.9% | 9.2% |
| Digital Goods | 8.3% | 12.0% |
| Flowers/Gifts | 8.3% | 8.6% |
| Gaming | 6.4% | 7.2% |
| Other Services | 3.2% | 9.3% |
| Travel | 3.2% | 3.8% |
| Financial Service | 2.6% | 3.8% |
| Mass Merchant | 2.6% | 5.0% |
| Insurance | 1.9% | 1.8% |
| Telecom | 1.9% | 5.8% |
| Direct Response | 1.9% | 1.3% |

Merchants of all sizes were well distributed among the different categories of goods/services sold online. While the majority of Merchants polled in each group are from the largest organizations (more than \$50 million in annual revenue), the Mobile Payments & Fraud Survey also included a number of respondents from small to medium-sized Merchants.

| Goods/services | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|-----------------------|--------|----------|-----------|-----------|---------|
| Apparel/Accessories | 19.2% | 6.6% | 7.3% | 6.6% | 60.3% |
| Books/Music/Video | 15.4% | 8.7% | 4.8% | 1.9% | 69.2% |
| Computer/Electronics | 14.2% | 3.5% | 11.3% | 3.5% | 67.4% |
| Dating/Social Sites | 0% | 12.5% | 0% | 12.5% | 75.0% |
| Digital Goods | 13.4% | 4.9% | 11.0% | 2.4% | 68.3% |
| Direct Response | 11.1% | 0% | 11.1% | 22.2% | 55.6% |
| Financial Service | 3.5% | 7.7% | 7.7% | 3.8% | 76.9% |
| Flowers/Gifts | 15.3% | 3.4% | 3.4% | 3.4% | 74.6% |
| Food/Drug | 14.0% | 5.0% | 5.0% | 8.0% | 68.0% |
| Gaming | 4.1% | 4.1% | 10.2% | 2.0% | 79.6% |
| Hardware/Home Improve | 12.5% | 7.1% | 8.0% | 3.6% | 68.8% |
| Health/Beauty | 14.1% | 4.4% | 5.9% | 4.4% | 71.1% |
| Housewares/Home Furn | 16.7% | 4.2% | 6.5% | 2.4% | 70.2% |
| Insurance | 8.3% | 8.3% | 0% | 8.3% | 75.0% |
| Jewelry | 18.5% | 3.7% | 8.9% | 5.2% | 63.7% |
| Mass Merchant | 0% | 0% | 2.9% | 2.9% | 94.1% |
| Money Movement | 50.0% | 0% | 0% | 25.0% | 25.0% |
| Office Supplies | 7.9% | 3.2% | 9.5% | 6.3% | 73.0% |
| Other Services | 31.3% | 4.7% | 9.4% | 10.9% | 43.8% |
| Specialty/Non-Apparel | 27.8% | 4.6% | 7.4% | 2.8% | 57.4% |
| Sporting Goods | 12.5% | 6.3% | 4.2% | 7.3% | 69.8% |
| Telecom | 17.5% | 5.0% | 10.0% | 2.5% | 65.0% |
| Toys/Hobbies | 10.6% | 2.9% | 2.9% | 2.9% | 80.8% |
| Travel | 19.2% | 7.7% | 7.7% | 0% | 65.4% |

Merchant participants in this year's Mobile Payments & Fraud Survey have a great deal of online experience. Sixty percent of Merchants polled have 5 or more years' experience selling online. An additional 25% have at least 1 year of experience with online sales.



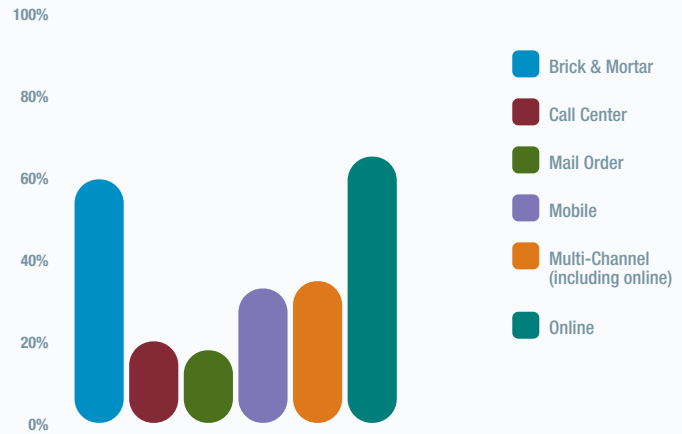
Experienced Merchants show up all in all categories. At least half the Merchants from each group of goods and services have 5 or more years of e-commerce experience.

| Years selling online | < 1 yr | 1-2 yrs | 3-4 yrs | > 5 yrs |
|-----------------------|--------|---------|---------|---------|
| Apparel/Accessories | 10.4% | 8.2% | 12.0% | 69.4% |
| Books/Music/Video | 4.8% | 6.7% | 14.4% | 74.0% |
| Computer/Electronics | 9.9% | 8.5% | 12.1% | 69.5% |
| Dating/Social Sites | 12.5% | 25.0% | 12.5% | 50.0% |
| Digital Goods | 6.1% | 11.0% | 13.4% | 69.5% |
| Direct Response | 11.1% | 22.2% | 11.1% | 55.6% |
| Financial Service | 7.7% | 7.7% | 7.7% | 76.9% |
| Flowers/Gifts | 6.8% | 8.5% | 13.6% | 71.2% |
| Food/Drug | 23.0% | 13.0% | 5.0% | 59.0% |
| Gaming | 2.0% | 8.2% | 12.2% | 77.6% |
| Hardware/Home Improve | 9.8% | 7.1% | 18.8% | 64.3% |
| Health/Beauty | 6.7% | 11.1% | 14.1% | 68.1% |
| Housewares/Home Furn | 8.3% | 9.5% | 11.9% | 70.2% |
| Insurance | 0% | 16.7% | 8.3% | 75.0% |
| Jewelry | 8.9% | 11.9% | 11.1% | 68.1% |
| Mass Merchant | 2.9% | 0% | 2.9% | 94.1% |
| Money Movement | 0% | 0% | 25.0% | 75.0% |
| Office Supplies | 4.8% | 4.8% | 11.1% | 79.4% |
| Other Services | 17.2% | 15.6% | 15.6% | 51.6% |
| Specialty/Non-Apparel | 13.0% | 8.3% | 14.8% | 63.9% |
| Sporting Goods | 5.2% | 9.4% | 14.6% | 70.8% |
| Telecom | 15.0% | 12.5% | 12.5% | 60.0% |
| Toys/Hobbies | 4.8% | 5.8% | 15.4% | 74.0% |
| Travel | 11.5% | 3.8% | 3.8% | 80.8% |

This experience is not limited to the online channel. When asked which channels they manage or influence 65% of Merchants indicated the online channel, but 60% also are involved with the brick and mortar channel, 33% manage or influence the mobile channel and 20% manage or influence call-center operations. A significant increase in Merchant survey respondents in this second annual Mobile Payments & Fraud Survey has resulted in much greater representation of the brick-and-mortar channel. The 60% of respondents that manage or influence this channel is a substantial increase from the 27% of Merchants that said the same last year. This increase manifests itself in several ways in this year's data, including increased focus on NFC payments, in-store mobile wallets and other factors discussed throughout this report.

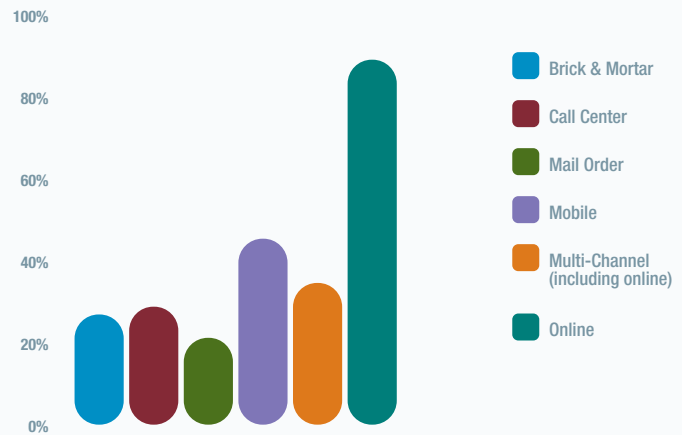
2013

Sales
channels
(merchants)



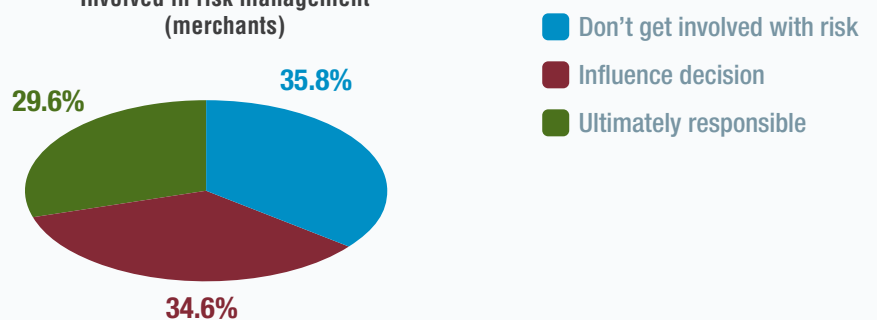
2012

Sales
channels
(merchants)



A majority of Merchant respondents also count risk management among their responsibilities. More than two-thirds of respondents are involved with risk management and at least influence risk decisions, while 30% indicate they are ultimately responsible for risk management.

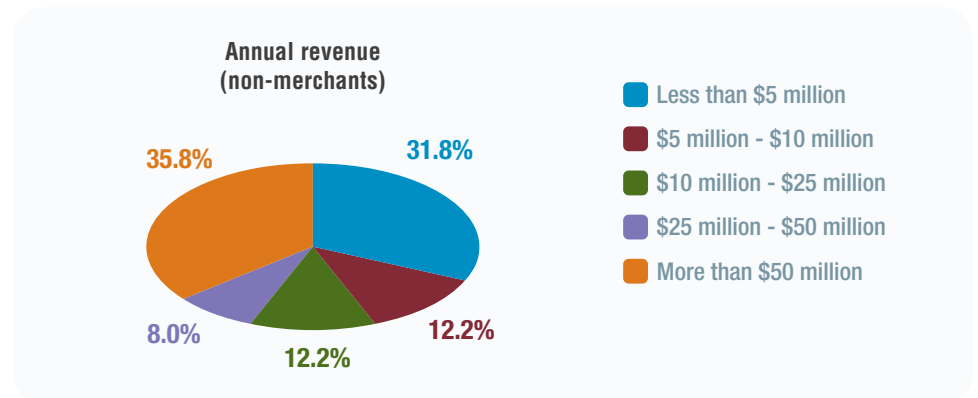
Involved in risk management
(merchants)



Non-Merchants

In addition to Merchant respondents, the Mobile Payments & Fraud Survey reached individuals representing many other types of organizations that are impacted by the mobile channel including Service Providers, Acquirers, Card Associations and Card Issuers. Among these non-Merchant respondents, which represented 43% of the survey population overall, 36% represented large organizations with annual revenues greater than \$50 million, while 32% had revenues of less than \$5 million.

When broken down by the type of business, Service Providers are the most diverse in terms of annual revenue. Card Associations, Issuers and Acquirers are more likely to have annual revenues greater than \$50 million.



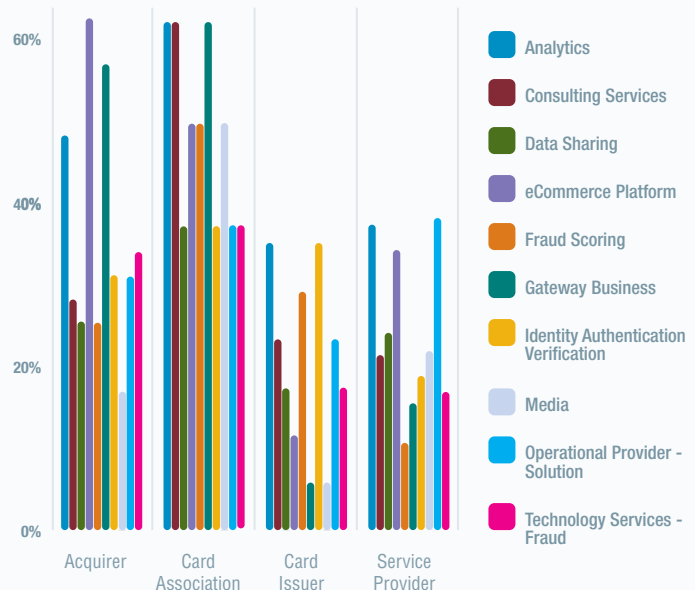
| Annual revenue by type (non-merchants) | Acquirer | Card Association | Card Issuer | Service Provider |
|--|----------|------------------|-------------|------------------|
| Less than \$5MM | 20.0% | 0% | 5.9% | 34.6% |
| \$5MM - \$10MM | 8.6% | 37.5% | 0% | 12.6% |
| \$10MM - \$25MM | 20.0% | 12.5% | 17.6% | 11.3% |
| \$25MM - \$50MM | 2.9% | 0% | 5.9% | 8.7% |
| More than \$50MM | 48.6% | 50.0% | 70.6% | 32.8% |

The Service Providers, Acquirers, Card Associations and Issuers surveyed also are diverse in terms of the types of payment and fraud-prevention services they offer. Each category of services included in the Mobile Payments & Fraud Survey is offered by at least 14% of non-Merchant respondents, while three different types of services are supported by more than 35% of non-Merchant respondents. Respondents were most likely to be with companies that offer Analytics, an Operational Solution or an eCommerce Platform. More than one in every five respondents' organizations offer Consulting Services (for payments or fraud), Data Sharing services, Identity Authentication or Verification, or Media services.

Payment/fraud services offered (non-merchants)

| | 2012 | 2013 |
|---|-------|-------|
| Analytics | 28.0% | 38.7% |
| Consulting Services Pmts or Fraud | 30.1% | 22.9% |
| Data Sharing | 10.8% | 24.4% |
| eCommerce Platform | 47.3% | 36.0% |
| Fraud Scoring | 26.9% | 13.6% |
| Gateway Business | 30.1% | 19.3% |
| Identity Authentication or Verification | 41.9% | 20.9% |
| Media | 11.8% | 21.6% |
| Operational Provider - Solution | 38.7% | 37.3% |
| Technology Services - Fraud | 30.1% | 18.9% |

Services offered by type (non-merchants)



The Service Providers and other non-Merchant survey respondents also offer services to support a variety of different channels and types of products including digital goods, shippable goods and services.

Services offered (non-merchants)

| | 2012 | 2013 |
|-----------------|-------|-------|
| Digital Goods | 52.7% | 29.3% |
| Services | 82.8% | 74.2% |
| Shippable Goods | 41.9% | 36.0% |
| Other | n/a | 9.8% |

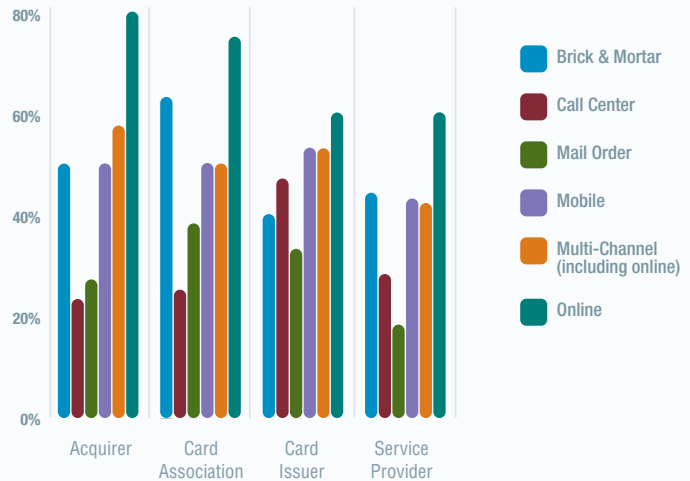
| Services offered | Acquirer | Card Association | Card Issuer | Service Provider |
|------------------|----------|------------------|-------------|------------------|
| Digital Goods | 45.7% | 37.5% | 11.8% | 28.5% |
| Services | 85.7% | 62.5% | 76.5% | 73.3% |
| Shippable Goods | 48.6% | 62.5% | 17.6% | 35.1% |
| Other | 11.4% | 25.0% | 11.8% | 9.2% |

Service Providers, Acquirers, Card Associations and Issuers participating in the Mobile Payments & Fraud Survey also manage or influence multiple channels. Nearly two-thirds of non-Merchant respondents indicated that they manage or influence the online channel, while more than 44% manage or influence the mobile channel.

Sales channels (non-merchants)

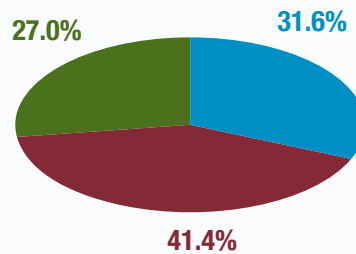
| | 2012 | 2013 |
|----------------------------------|-------|-------|
| Brick & Mortar | 34.1% | 44.9% |
| Call Center | 28.6% | 28.3% |
| Mail Order | 16.5% | 19.7% |
| Mobile | 53.8% | 44.4% |
| Multi-Channel (including online) | 47.3% | 43.7% |
| Online | 72.5% | 63.1% |

Channels that respondents manage or influence by type (non-merchants)



Over 68% of non-Merchant respondents influence risk management decisions or are ultimately responsible for risk management within their companies. At least two-thirds of respondents from each non-Merchant type of businesses are involved with risk management in their company.

**Involved in risk management
by type (non-merchants)**



- Don't get involved with risk
- Influence Decision
- Ultimately Responsible

| Involved in risk mgmt (non-merchants) | Acquirer | Card Association | Card Issuer | Service Provider |
|---------------------------------------|----------|------------------|-------------|------------------|
| Not involved with risk | 16.7% | 25.0% | 33.3% | 32.9% |
| Influence decision | 60.0% | 50.0% | 53.3% | 39.1% |
| Ultimately responsible | 23.3% | 25.0% | 13.3% | 28.0% |

Mobile In eCommerce

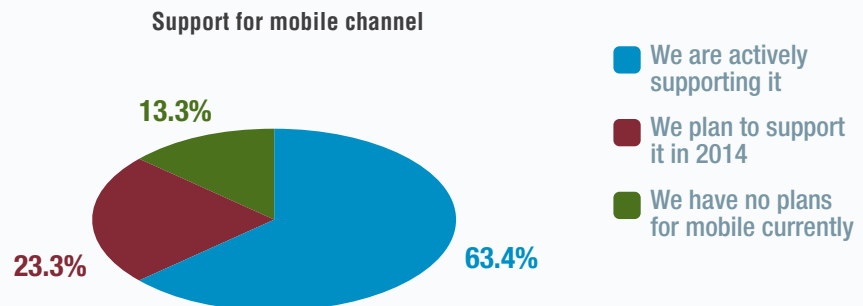
This section examines three key aspects of mobile eCommerce:

- Current and future levels of support for the mobile channel
- Importance of the mobile channel for organizations' growth plans
- Importance of being able to detect mobile devices in eCommerce transactions

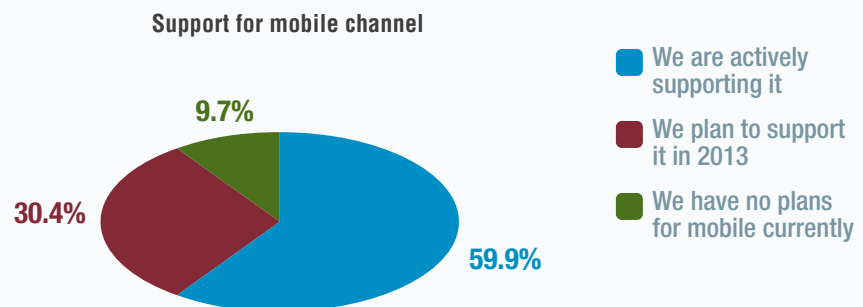
Support for the Mobile Channel

Compared to the inaugural Mobile Payments & Fraud Survey, a slightly higher percentage of organizations actively support mobile now than they did last year. That means that nearly two-thirds of survey respondents—including Merchants, Service Providers and other organizations—now actively support the mobile channel, while an additional 23% plan to in 2014. Somewhat surprisingly, the number of respondents saying that currently they don't have plans for mobile increased slightly, up 3.6 percentage points from 9.7% to 13.3%.

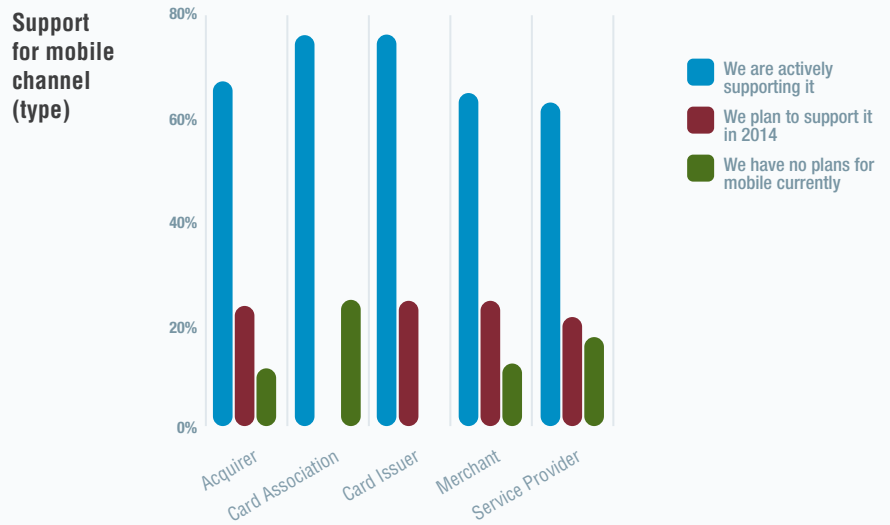
2013



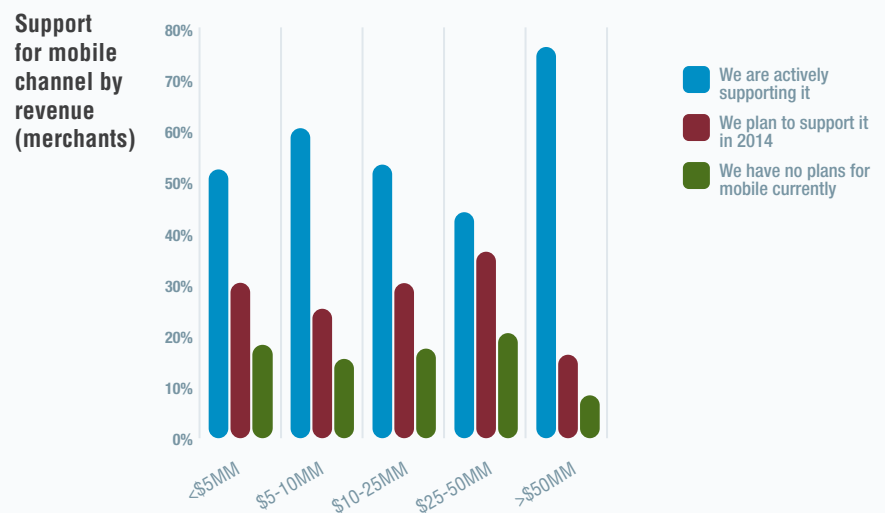
2012



Active support for the mobile channel is found across all types of organizations surveyed. More than 60% of all Merchants, Service Providers, Acquirers, Card Associations and Card Issuers all actively support mobile. Only 12% of Merchants have no current plans for the mobile channel.



Although 64% of Merchants overall actively support the mobile channel, this varies considerably by Merchant size. While 45% of Merchants with annual revenues below \$5 million actively support mobile today, 38% plan to add support in 2014. Meanwhile, more than three-fourths of Merchants with greater than \$50 million in annual revenue actively support mobile today, while only 7% have no current plans to support mobile.



A Merchant's support or planned support of the mobile channel not only varies by Merchant size, but also by the goods and services the Merchant sells online. Industries where at least three out of every four Merchants actively support the mobile channel include Books/Music/Video, Dating/Social Sites, Flowers/Gifts, Gaming, Money Movement and Toys/Hobbies. At least half of Merchants in each industry represented actively support mobile today, while many more plan to support the mobile channel in 2014.

| Support for mobile by market segment | Actively Support | No Plans to Support | Plan to Support in 2014 |
|--------------------------------------|------------------|---------------------|-------------------------|
| Apparel/Accessories | 69.4% | 9.5% | 21.1% |
| Books/Music/Video | 76.0% | 6.7% | 17.3% |
| Computer/Electronics | 69.5% | 6.4% | 24.1% |
| Dating/Social Sites | 75.0% | 12.5% | 12.5% |
| Digital Goods | 73.2% | 6.1% | 20.7% |
| Direct Response | 66.7% | 11.1% | 22.2% |
| Financial Service | 73.1% | 11.5% | 15.4% |
| Flowers/Gifts | 74.6% | 6.8% | 18.6% |
| Food/Drug | 67.0% | 9.0% | 24.0% |
| Gaming | 81.6% | 2.0% | 16.3% |
| Hardware/Home Improvement | 72.3% | 8.9% | 18.8% |
| Health/Beauty | 72.6% | 5.9% | 21.5% |
| Housewares/Home Furnishings | 72.6% | 6.0% | 21.4% |
| Insurance | 50.0% | 8.3% | 41.7% |
| Jewelry | 65.2% | 11.1% | 23.7% |
| Mass Merchant | 91.2% | 2.9% | 5.9% |
| Money Movement | 75.0% | 0% | 25.0% |
| Office Supplies | 71.4% | 6.3% | 22.2% |
| Other Services | 67.2% | 9.4% | 23.4% |
| Specialty/Non-Apparel | 63.0% | 13.0% | 24.1% |
| Sporting Goods | 71.9% | 6.3% | 21.9% |
| Telecom | 62.5% | 7.5% | 30.0% |
| Toys/Hobbies | 76.0% | 6.7% | 17.3% |
| Travel | 73.1% | 3.8% | 23.1% |

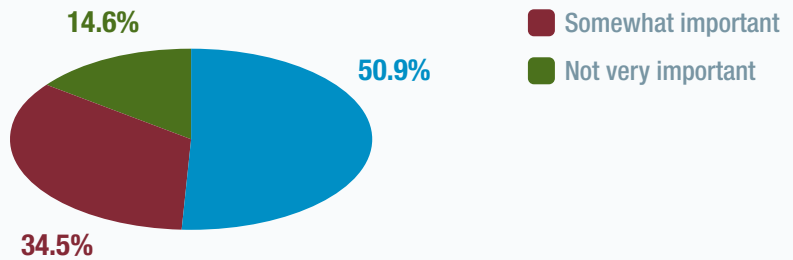
Importance of Mobile to Growth Plans

This year, a slightly higher percentage of organizations consider mobile to be an important component of their business than last year: 85.4% this year (“Somewhat Important” or “Very Important”) versus 83.6% last year.

Compared to last year, the number of respondents that find a mobile strategy to be “Very Important” to their company’s growth plans grew by 7%, while those who felt mobile strategies were “Not Very Important” fell by 2%.

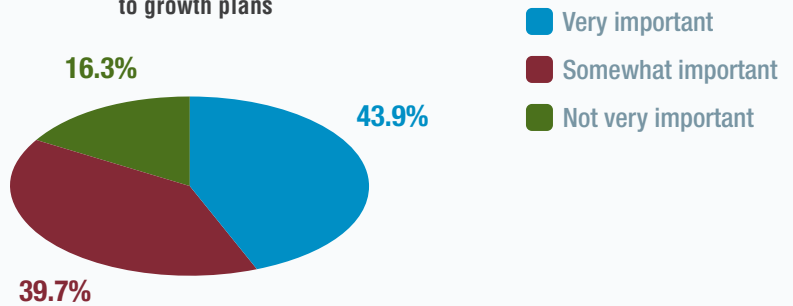
2013

Importance of a mobile strategy
to growth plans



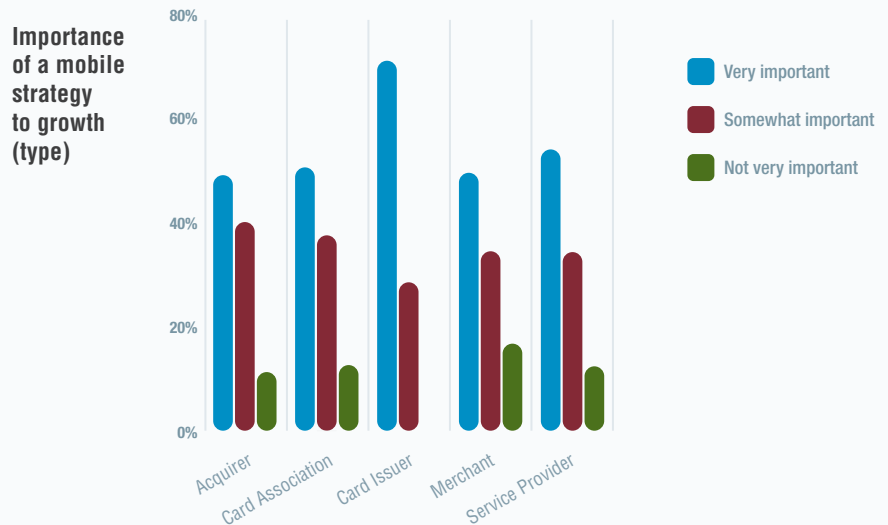
2012

Importance of a mobile strategy
to growth plans

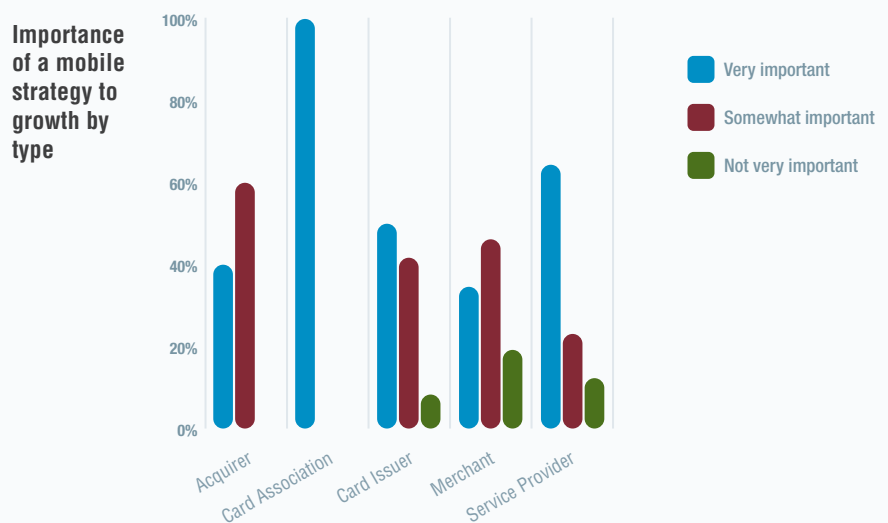


Not only do more than half of organizations overall believe mobile strategies are “Very Important” to their growth plan, but every type of organization is more likely to indicate that a mobile strategy is “Very Important” rather than “Somewhat Important” or “Not Very Important.” In the inaugural Mobile Payments & Fraud Survey, Merchants were the least likely to find mobile strategies “Very Important,” while most found mobile strategies only “Somewhat Important.”

2013



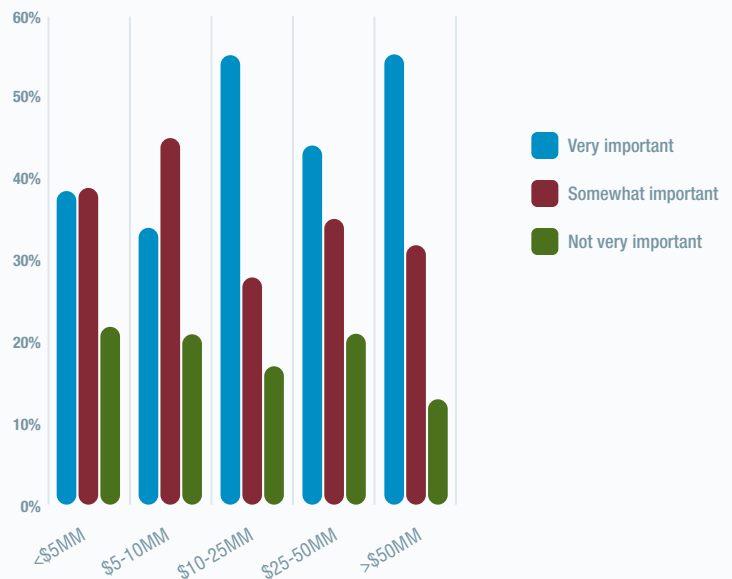
2012



While Merchants are most likely to indicate mobile strategies are “Very Important” for 2014 growth plans overall, larger Merchants are more likely to think so than smaller Merchants. Merchants with less than \$10 million in annual revenue were more likely to find mobile strategies “Somewhat Important” rather than “Very Important,” while the opposite is true for those with annual revenue greater than \$10 million. Whereas Merchants of all sizes were most likely to state mobile strategies were only “Somewhat Important” to their 2013 growth plans when asked for last year’s report, the three largest groups of Merchants were most likely to say mobile is “Very Important” to their 2014 growth plans when asked in this year’s report.

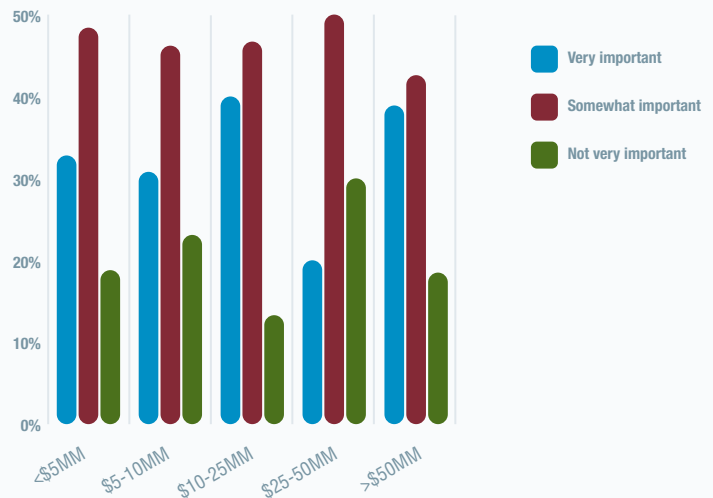
2013

**Importance
of a mobile
strategy to
growth by
revenue
(merchants)**



2012

**Importance
of a mobile
strategy to
growth by
revenue
(merchants)**



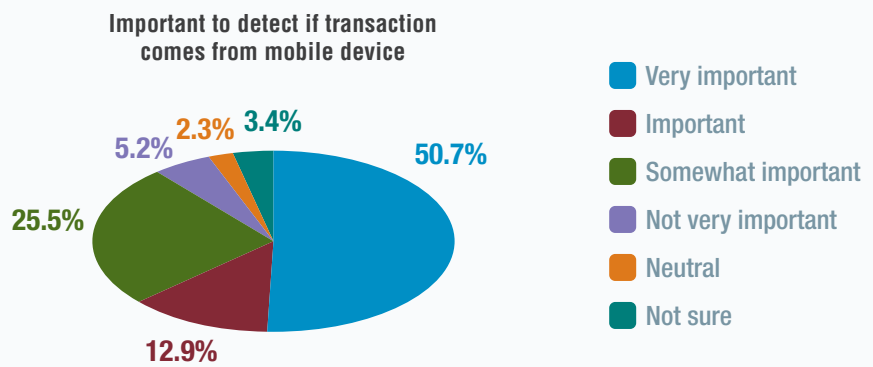
Of course, the importance of mobile strategies to a Merchant's growth plans also depends on the types of goods or services the Merchant sells online. At least half of Merchants from every category of goods/services sold except for Direct Response, Food/Drug and Specialty/Non-Apparel believe mobile strategies are "Very Important" to their growth plans. Types of Merchants most likely to find mobile strategies to be "Very Important" include Computer/Electronics, Dating/Social Sites, Digital Goods, Financial Services, Gaming, Health/Beauty, Mass Merchants, Office Supplies and Travel.

| Importance of mobile strategy to growth by segment | Very Important | Somewhat Important | Not Very Important |
|--|----------------|--------------------|--------------------|
| Apparel/Accessories | 54.6% | 32.2% | 13.2% |
| Books/Music/Video | 56.7% | 31.7% | 11.5% |
| Computer/Electronics | 61.7% | 27.0% | 11.3% |
| Dating/Social Sites | 62.5% | 25.0% | 12.5% |
| Digital Goods | 59.8% | 31.7% | 8.5% |
| Direct Response | 44.4% | 44.4% | 11.1% |
| Financial Service | 65.4% | 23.1% | 11.5% |
| Flowers/Gifts | 57.6% | 32.2% | 10.2% |
| Food/Drug | 47.0% | 29.0% | 24.0% |
| Gaming | 69.4% | 22.4% | 8.2% |
| Hardware/Home Improvement | 53.6% | 31.3% | 15.2% |
| Health/Beauty | 61.5% | 28.1% | 10.4% |
| Housewares/Home Furnishings | 51.8% | 34.5% | 13.7% |
| Insurance | 58.3% | 33.3% | 8.3% |
| Jewelry | 54.8% | 33.3% | 11.9% |
| Mass Merchant | 64.7% | 23.5% | 11.8% |
| Money Movement | 75.0% | 25.0% | 0% |
| Office Supplies | 60.3% | 27.0% | 12.7% |
| Other Services | 53.1% | 32.8% | 14.1% |
| Specialty/Non-Apparel | 47.2% | 36.1% | 16.7% |
| Sporting Goods | 57.3% | 29.2% | 13.5% |
| Telecom | 57.5% | 27.5% | 15.0% |
| Toys/Hobbies | 57.7% | 26.9% | 15.4% |
| Travel | 61.5% | 23.1% | 15.4% |

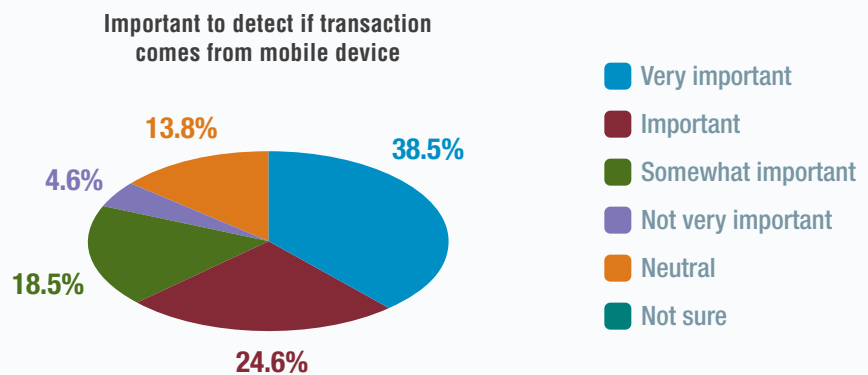
Importance of Detecting Mobile Devices

The Mobile Payments & Fraud Survey also found that a higher percentage of payment and fraud professionals, representing organizations of all types, now believe it is “Very Important” to be able to recognize when a transaction is coming from a mobile device. Whereas less than 39% of respondents found this to be “Very Important” in the inaugural report, more than half of respondents feel that way today. Additionally, more respondents are more certain that it is important to recognize if transactions originate from mobile devices today than they were last year. Nearly 14% of respondents were “Neutral” on the matter last year, but less than 6% are “Neutral” or “Not Sure” today.

2013



2012



Amongst only Merchants, more than half believe being able to detect when transactions are coming from mobile devices is “Very Important,” and this is true across Merchants of all sizes. Smaller Merchants, however, are the most likely to find this to be “Not Very Important”: 13% of Merchants with annual revenues less than \$5 million indicated this compared to only 3% of Merchants with annual revenues greater than \$50 million and 4% of Merchants with annual revenues between \$25 and \$50 million.

| Detect from mobile by revenue (merchants) | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|---|--------|----------|-----------|-----------|---------|
| Very important | 54.5% | 58.8% | 51.9% | 52.2% | 54.3% |
| Somewhat important | 27.7% | 29.4% | 33.3% | 34.8% | 37.2% |
| Not very important | 12.9% | 11.8% | 11.1% | 4.3% | 3.1% |
| Not sure | 5.0% | 0% | 3.3% | 8.7% | 5.4% |

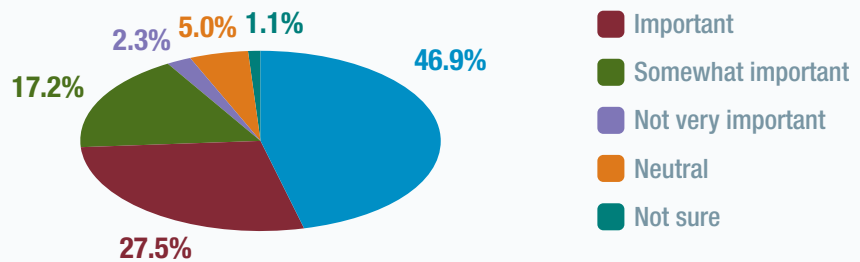
There was some variation in the importance of being able to recognize mobile transactions by types of goods/services sold online. While at least two-thirds of Merchants in the Computers/Electronics, Digital Goods, Direct Response, Gaming, Hardware/Home Improvement, Office Supplies and Travel industries think being able to recognize transactions from mobiles is “Very Important,” less than half of Merchants in the Apparel/Accessories, Financial Services, Flowers/Gifts and Jewelry industries agree.

| Detect from mobile by segment (merchants) | Very Important | Somewhat Important | Not Very Important | Not Sure |
|---|----------------|--------------------|--------------------|----------|
| Apparel/Accessories | 8.0% | 39.2% | 48.0% | 4.8% |
| Books/Music/Video | 5.6% | 33.3% | 58.3% | 2.8% |
| Computer/Electronics | 4.2% | 25.0% | 68.8% | 2.1% |
| Dating/Social Sites | 0% | 33.3% | 50.0% | 16.7% |
| Digital Goods | 3.7% | 22.2% | 74.1% | 0% |
| Direct Response | 0% | 16.7% | 66.7% | 16.7% |
| Financial Service | 0% | 66.7% | 33.3% | 0% |
| Flowers/Gifts | 0% | 47.6% | 47.6% | 4.8% |
| Food/Drug | 4.8% | 28.6% | 59.5% | 7.1% |
| Gaming | 0% | 14.3% | 85.7% | 0% |
| Hardware/Home Improvement | 2.6% | 26.3% | 71.1% | 0% |
| Health/Beauty | 2.0% | 35.3% | 60.8% | 2.0% |
| Housewares/Home Furnishings | 5.1% | 33.9% | 59.3% | 1.7% |
| Insurance | 0% | 0% | 50.0% | 50.0% |
| Jewelry | 8.7% | 39.1% | 45.7% | 6.5% |
| Mass Merchant | 0% | 40.0% | 60.0% | 0% |
| Money Movement | 0% | 0% | 100.0% | 0% |
| Office Supplies | 0% | 28.6% | 71.4% | 0% |
| Other Services | 5.3% | 36.8% | 50.0% | 7.9% |
| Specialty/Non-Apparel | 6.3% | 35.4% | 52.1% | 6.3% |
| Sporting Goods | 6.3% | 40.6% | 53.1% | 0% |
| Telecom | 5.6% | 27.8% | 61.1% | 5.6% |
| Toys/Hobbies | 3.0% | 36.4% | 57.6% | 3.0% |
| Travel | 0% | 30.8% | 69.2% | 0% |

In terms of non-Merchant organizations, the share of respondents who believe being able to recognize transactions from mobile devices is “Very Important” is less than half, but still significantly more than last year. The percentage of non-Merchant respondents that believe it is “Very Important” to be able to recognize transactions from mobile devices increased from 39% last year to 47% this year, while those who find it “Somewhat Important” increased by seven percentage points and those who find it “Not Very Important” fell from 4.4% to 2.3%.

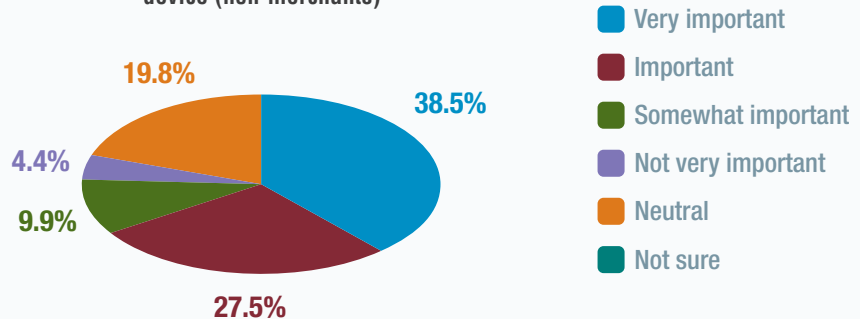
2013

Detect transaction from mobile device (non-merchants)



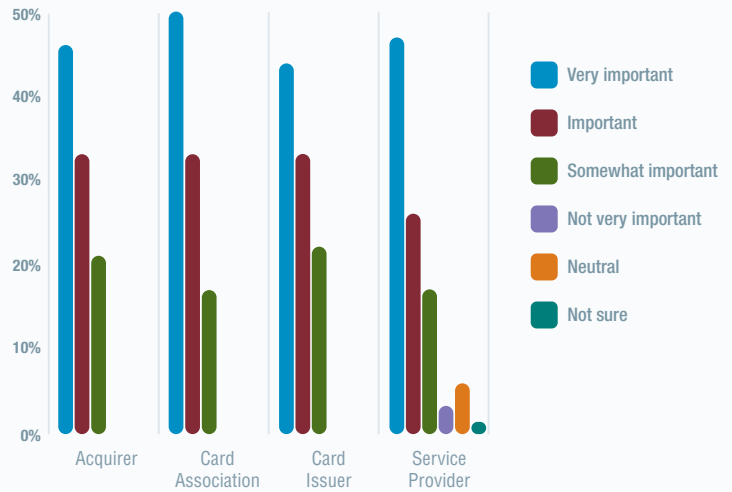
2012

Detect transaction from mobile device (non-merchants)



Each type of non-Merchant organization was most likely to indicate that being able to recognize mobile transactions is “Very Important,” with “Important” being the next most popular response. Only a small percentage of Service Providers indicated that being able to recognize mobile devices is “Not Very Important,” while all Acquirer, Card Association and Issuer respondents said this is at least “Somewhat Important.”

Detect transaction from mobile device by type (non-merchants)



Critical Aspects of Mobile eCommerce

This section looks at what makes mobile important and what factors respondents are most focused on for the mobile channel. Findings include:

- How the mobile channel adds value
- Resources employed to enable mobile eCommerce
- Preferred forms of payment in the mobile channel
- Geographical regions where mobile is highest priority
- Obstacles to adoption of mobile eCommerce
- Fraud risk in the mobile sales channel
- Fraud tools for mobile eCommerce
- Ability to detect mobile devices

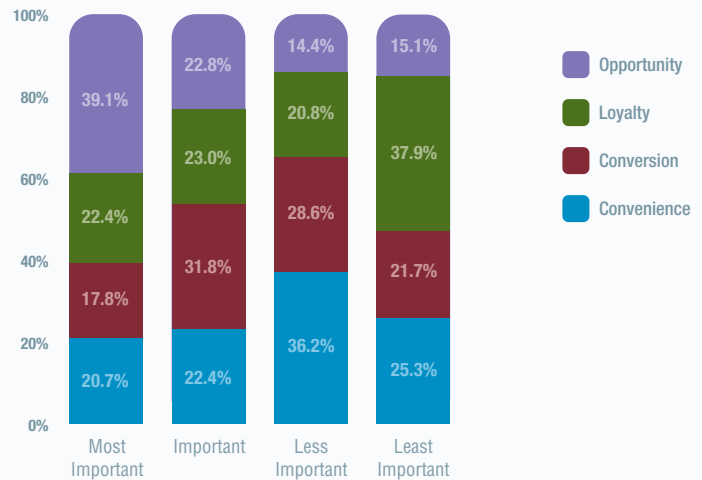
How the Mobile Channel Adds Value

Respondents were asked to rank in terms of importance what their company is trying to achieve through its mobile strategy. Respondents ranked four primary areas where the mobile channel can add value:

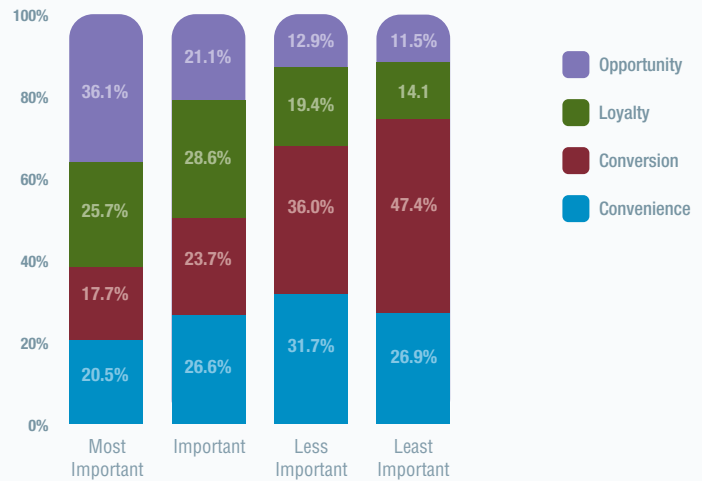
- **Convenience** - faster checkout/processing of payments
- **Opportunity** - increase leads and sales generation into all channels
- **Conversion** - upsell opportunities and location-based promotions
- **Loyalty** - increase consumer loyalty

When asked to rank the importance of each of these characteristics, the two areas of value-add that Merchants most want to achieve with their mobile strategies are Opportunity and Conversion. Opportunity was considered “Most Important” in this report and last year’s report, but emphasis on Conversion rose from the lowest priority (“Least Important”) previously to the second-highest (“Important”) now. Overall, respondents were most likely to indicate Opportunity is the “Most Important” factor, Conversion is “Important,” Convenience is “Less Important” and Loyalty is “Least Important.”

2013

Rank
areas of
mobile
value-add


2012

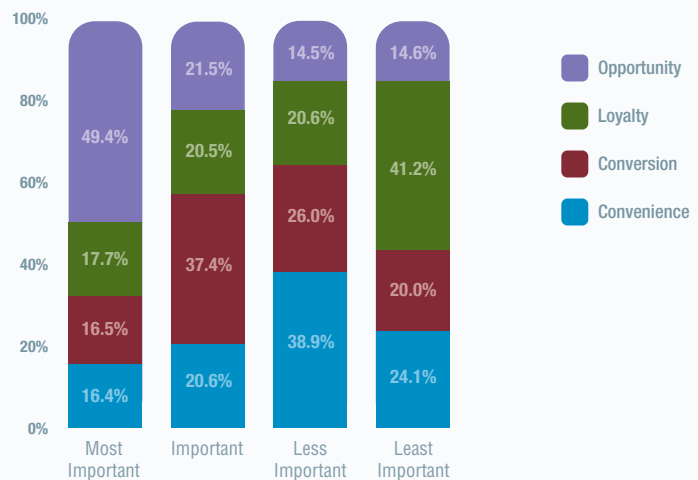
Rank
areas of
mobile
value-add


When looking only at Merchants, Opportunity is “Most Important” at nearly 50%. Across both years of the Mobile Payments & Fraud Survey, Merchants have prized Opportunity most. They see the technology as a way to increase leads and sales generation into all channels. Not only did this hold true this year, but the portion of Merchants that ranked Opportunity as “Most Important” increased from 41% in last year’s report to 49% this year.

What did change in a year’s time were the factors Merchants thought to be “Least Important.” Last year, Conversion was the “Least Important” factor to Merchants, as indicated by nearly half of Merchants. This year, however, the factor most likely to be considered the “Least Important” amongst Merchants was Loyalty, at 41%. Conversion was most likely to be considered an “Important” factor—selected by more than 37% of Merchants.

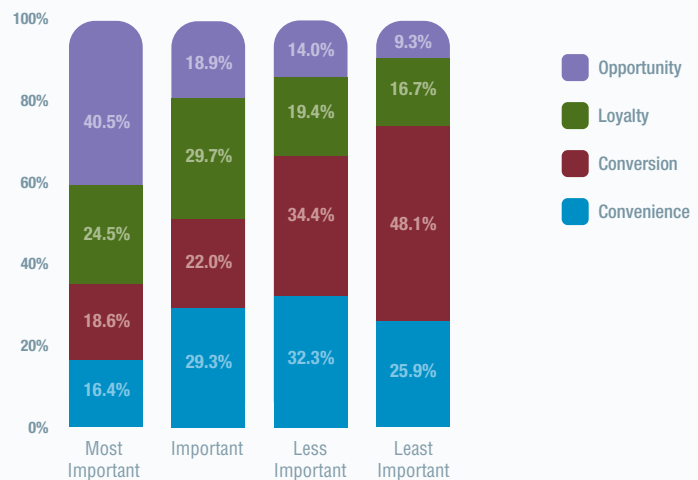
2013

**Rank areas
of mobile
value-add
(merchants)**



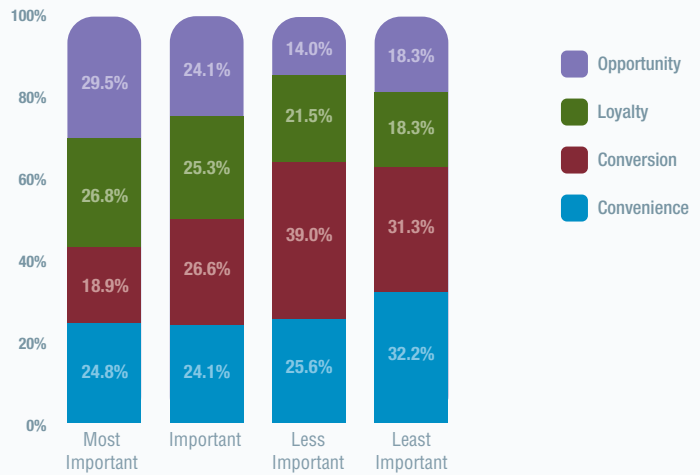
2012

**Rank areas
of mobile
value-add
(merchants)**



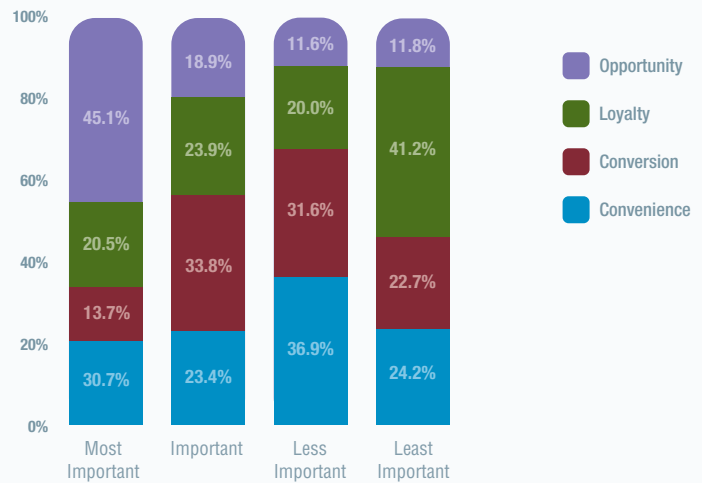
Non-Merchant respondents did not put as much emphasis on Conversion. This characteristic was most likely to be considered “Less Important” by Service Providers, Acquirers, Card Associations and Issuers. Opportunity was still most likely to be considered the “Most Important”, although Loyalty is not far behind. Non-Merchants found Convenience “Least Important.”

**Rank areas
of mobile
value-add
(non-
merchants)**

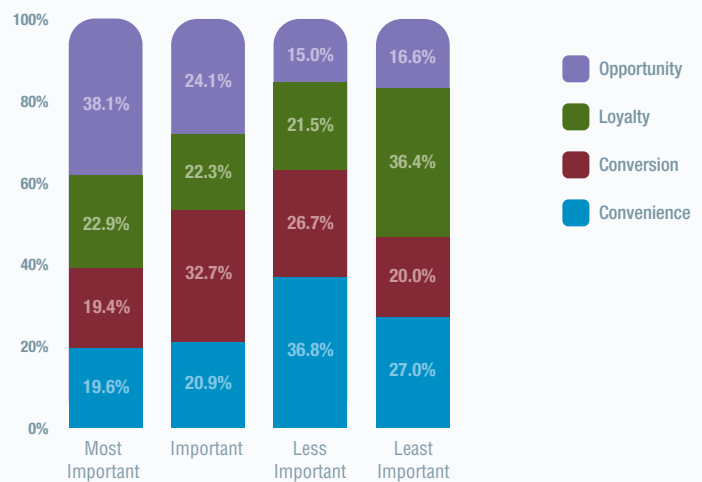


There are some differences between Merchants and all other organizations in terms of what they find important regarding the mobile channel. But Merchants are mostly aligned in terms of what they rank from “Most Important” to “Least Important,” even between the smallest and largest Merchant groups. Merchants with less than \$5 million in annual revenue and those with greater than \$50 million in annual revenue both consider Opportunity the “Most Important,” Conversion “Important,” Convenience “Less Important” and Loyalty the “Least Important” when it comes to what they are trying to achieve through their current and future mobile strategies.

Rank areas of mobile value-add (revenue <\$5MM)



Rank areas of mobile value-add (revenue >\$50MM)



Resources Employed to Enable Mobile eCommerce

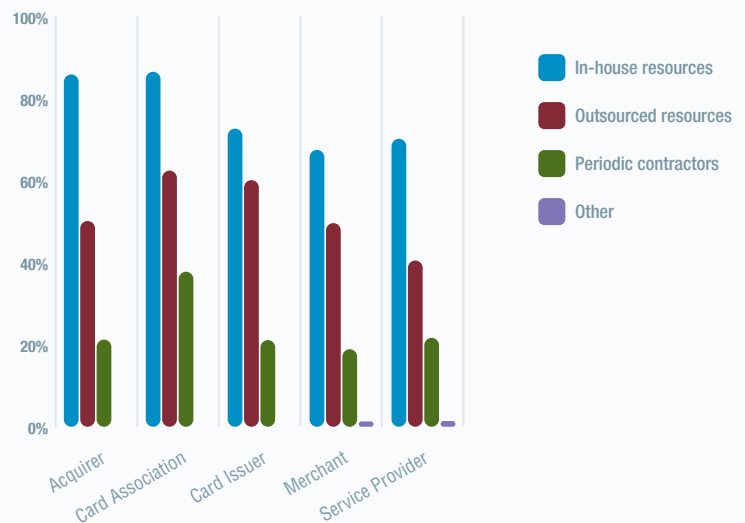
This second annual Mobile Payments & Fraud Survey found that many organizations are still using a combination of in-house and outside resources for their mobile implementations, but in-house efforts increased from 64% to 70% this year.

Resources for mobile implementation

| | 2012 | 2013 |
|----------------------|-------|-------|
| In-house resources | 64.0% | 69.8% |
| Outsourced resources | 49.4% | 46.2% |
| Periodic contractors | 20.2% | 18.9% |
| Other | 1.6% | 1.9% |

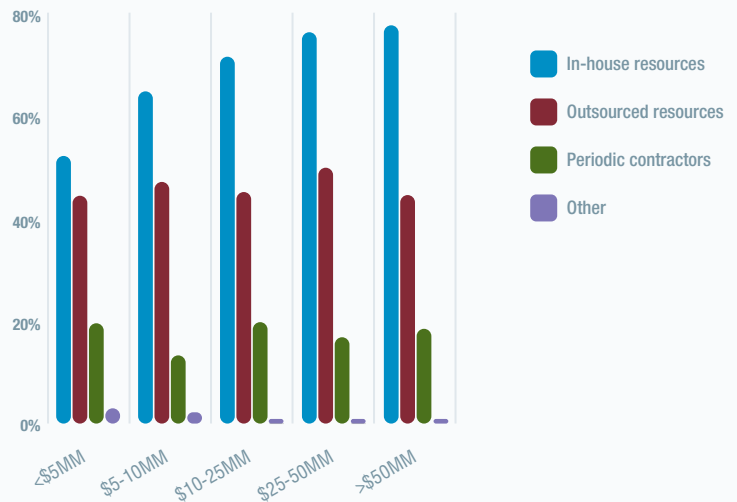
When broken down by the type of organization, each is more likely to employ in-house resources for mobile implementations than outsourced or other resources—at least two-thirds of organizations from each category are doing so. Card Associations and Card Issuers are the groups most likely to use outsourced resources instead of, or in addition to, in-house resources.

Mobile resources employed (by type)



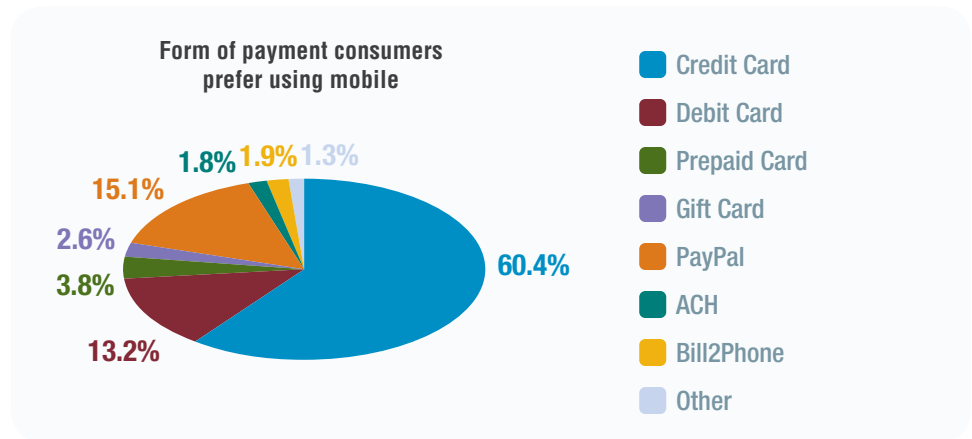
Regardless of revenue/size of the respondent, in-house resources rank as the most used resource for mobile implementations. And as revenue increases, the likelihood of using in-house resources increases. While just over 50% of organizations with revenues less than \$5 million annually use in-house resources for mobile implementations, nearly 80% of the largest ones do.

Mobile resources employed (by revenue)

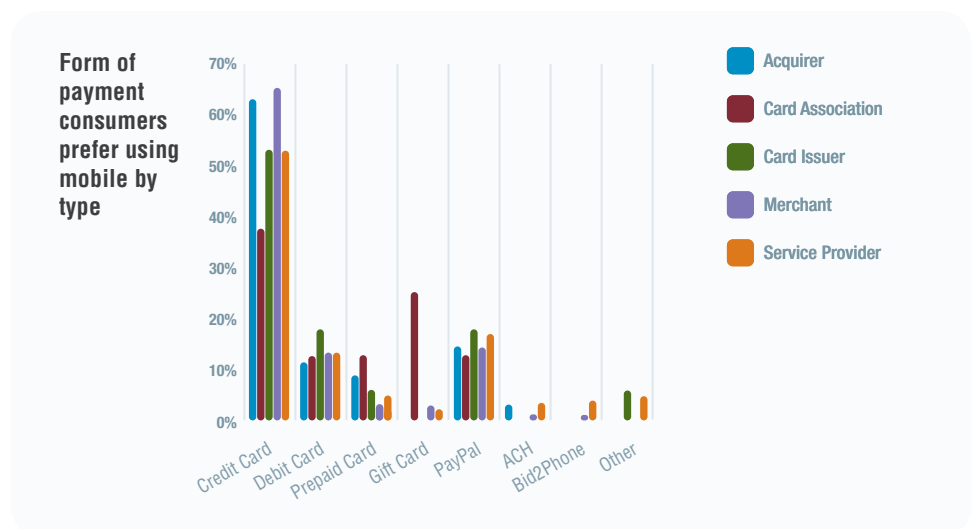


Preferred Forms of Payment for Mobile Transactions

There are many different forms of payments consumers can use from mobile devices, but according to most organizations, payment cards will be preferred. More than 60% of those polled think credit cards are the mobile payment method customers will prefer to use, while 13% say debit cards. The next most cited payment method is PayPal at 15%.



All types of organizations believe credit cards are the payment method consumers will prefer to process from mobile devices, but Merchants and Acquirers are the most confident (65% and 63% respectively). Interestingly, it is the Card Associations that are the least likely to believe credit cards will be the preferred form of payment consumers choose to use with mobile devices. Card Associations were more likely than any other group to choose Gift Cards or Prepaid Cards as the preferred form of mobile payment, while Card Issuers were the most likely to choose PayPal.



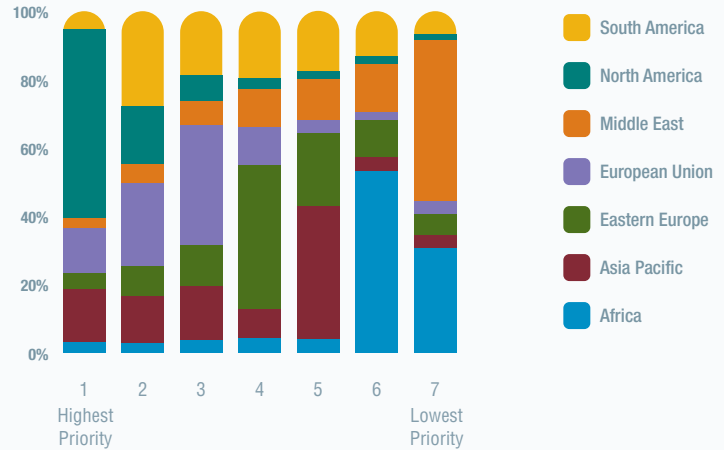
There is also some variation amongst Merchants regarding the form of payment they think consumers will prefer to process from mobile devices. This variation is influenced by the type of goods/services that the Merchant sells online. For each category, at least half of Merchants believe credit cards are the form of payment consumers will prefer to process from mobile devices. But different verticals show much variation in terms of how many believe consumers will prefer this payment method. For example, 25% of respondents in the Books/Music/Video and Money Movement industries believe consumers will prefer PayPal, while Prepaid Cards are most popular with the Direct Response and Insurance industries, and debit cards are most popular with Dating/Social Sites and Insurance.

| Form of pmt consumers prefer by market segment | ACH | Bill2Phone | Credit Card | Debit Card | Gift Card | PayPal | Prepaid Card |
|--|-------|------------|-------------|------------|-----------|--------|--------------|
| Apparel/Accessories | 0.6% | 0.6% | 68.5% | 9.5% | 3.2% | 15.8% | 1.9% |
| Books/Music/Video | 1.0% | 1.0% | 58.7% | 11.5% | 1.9% | 25.0% | 1.0% |
| Computer/Electronics | 0.7% | 1.4% | 63.1% | 13.5% | 2.1% | 17.0% | 2.1% |
| Dating/Social Sites | 0% | 0% | 62.5% | 25.0% | 0% | 12.5% | 0% |
| Digital Goods | 1.2% | 2.4% | 68.3% | 11.0% | 0% | 14.6% | 2.4% |
| Direct Response | 0% | 0% | 66.7% | 22.2% | 0% | 0% | 11.1% |
| Financial Service | 3.8% | 0% | 61.5% | 11.5% | 3.8% | 11.5% | 7.7% |
| Flowers/Gifts | 0% | 0% | 66.1% | 10.2% | 5.1% | 15.3% | 3.4% |
| Food/Drug | 0% | 0% | 62.0% | 18.0% | 5.0% | 12.0% | 3.0% |
| Gaming | 2.0% | 2.0% | 65.3% | 14.3% | 2.0% | 12.2% | 2.0% |
| Hardware/Home Improvement | 0% | 0% | 67.9% | 16.1% | 2.7% | 11.6% | 1.8% |
| Health/Beauty | 0.7% | 0.7% | 65.9% | 12.6% | 4.4% | 13.3% | 2.2% |
| Housewares/Home Furnishings | 0% | 0% | 64.9% | 16.1% | 2.4% | 15.5% | 1.2% |
| Insurance | 0% | 0% | 50.0% | 25.0% | 0% | 8.3% | 16.7% |
| Jewelry | 1.5% | 0% | 68.9% | 11.9% | 2.2% | 13.3% | 2.2% |
| Mass Merchant | 0% | 0% | 73.5% | 5.9% | 8.8% | 8.8% | 2.9% |
| Money Movement | 25.0% | 0% | 50.0% | 0% | 0% | 25.0% | 0% |
| Office Supplies | 0% | 0% | 68.3% | 14.3% | 1.6% | 9.5% | 6.3% |
| Other Services | 3.1% | 3.1% | 51.6% | 17.2% | 4.7% | 12.5% | 7.8% |
| Specialty/Non-Apparel | 0% | 0.9% | 63.0% | 16.7% | 2.8% | 15.7% | 0.9% |
| Sporting Goods | 1.0% | 2.1% | 64.6% | 11.5% | 3.1% | 15.6% | 2.1% |
| Telecom | 5.0% | 0% | 67.5% | 7.5% | 0% | 12.5% | 7.5% |
| Toys/Hobbies | 0% | 1.9% | 61.5% | 15.4% | 3.8% | 15.4% | 1.9% |
| Travel | 0% | 0% | 69.2% | 11.5% | 3.8% | 15.4% | 0% |

Key Geographic Regions for Mobile Efforts

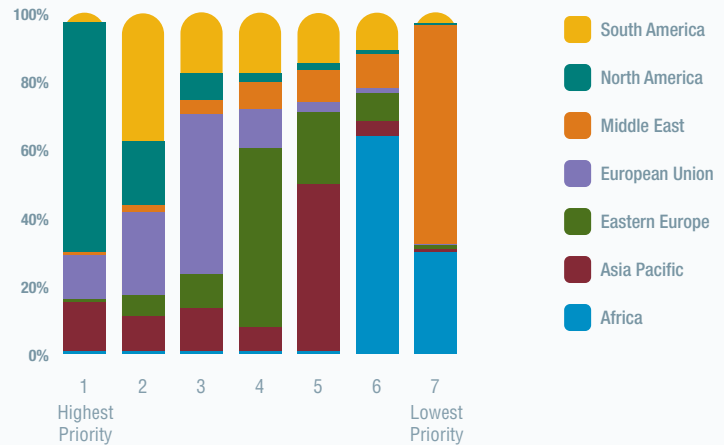
Across all survey respondents, North America is the highest geographical priority for mobile. The region of second highest priority is closely contested between South America (27%) and the European Union (25%). After that come Eastern Europe, Asia Pacific, Africa and the Middle East.

Highest priority regions for mobile (all)



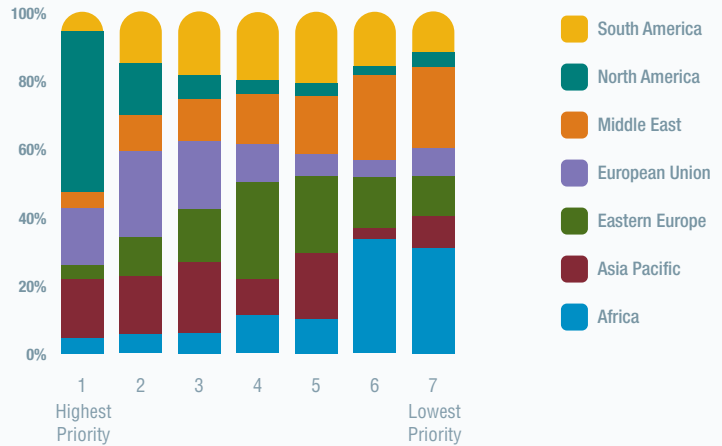
There is some differentiation in the regional priorities for mobile between Merchants and other types of organizations. While the majority of Merchants and Service Providers both rank North America as their highest priority, Merchants more clearly define South America as the second priority and the European Union as the third. This is a shift from the inaugural Mobile Payments & Fraud Survey when the European Union was clearly the second-most important region and South America next.

Highest priority regions for mobile (merchants)



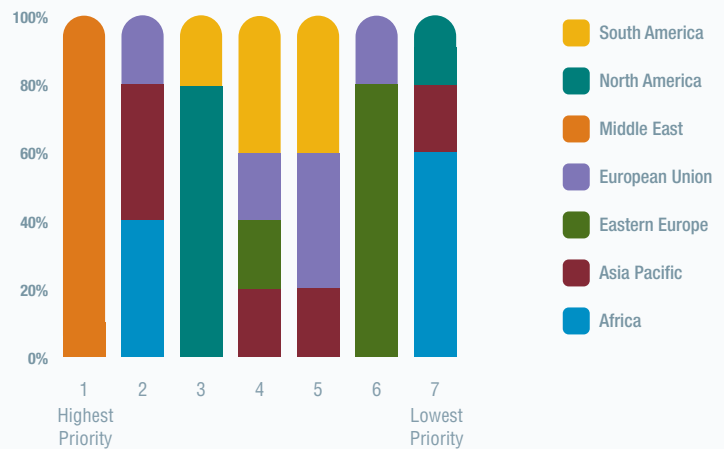
Service Providers, on the other hand, are most likely to choose the European Union as the second highest priority region for mobile, with the Asia Pacific and Eastern Europe regions likely to be ranked ahead of South America as well. Whereas Merchants more clearly identified the Middle East as the lowest priority and Africa as the second lowest, Service Providers are fairly evenly mixed in terms of whether the Middle East or Africa is their lowest priority.

Highest priority regions for mobile (service providers)

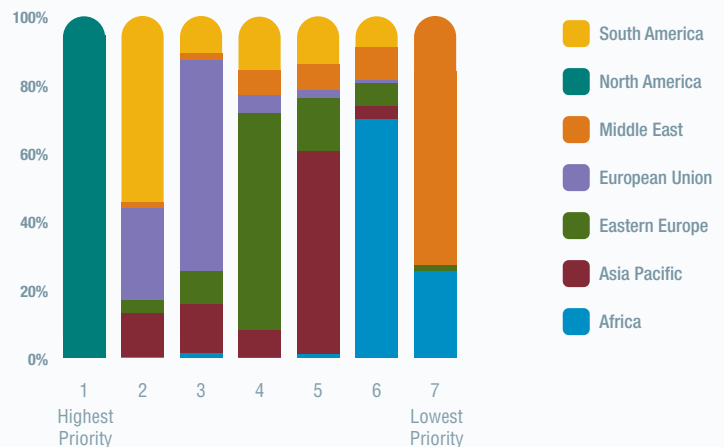


Of course, the regions where organizations place the highest priority for mobile depends on where they do business today, and the region that respondents consider the top priority has an effect on the remaining ranking of regions by priority. This is especially true for Merchants, whose second through last rankings of mobile priority by region are quite different based on the region they consider top priority. Merchants who consider the Middle East as the top priority, for example, are most likely to consider either Africa or the Asia Pacific region has the second priority, North America third, South America fourth, the European Union fifth, and Eastern Europe the sixth priority. This is very different than Merchants that rank North America as the top priority for mobile as their remaining priority rankings (in order) are South America, the European Union, Eastern Europe, Asia Pacific, Africa and the Middle East.

Merchants that rank Middle East as top priority for mobile



Merchants that rank North America as top priority for mobile



Obstacles to Adoption of Mobile eCommerce

While the mobile channel presents new opportunity, it also brings new obstacles. From last year to this year, what organizations think are the biggest obstacles to mobile adoption has shifted.

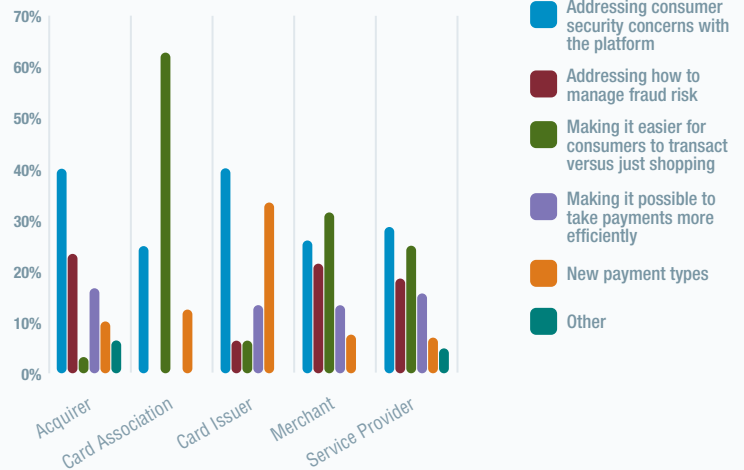
Across both years of the Mobile Payments & Fraud Survey Report, respondents found the difficulty consumers have transacting on the device to be the biggest obstacle to mobile adoption. This year, however, there is much more focus on security and fraud. The share of respondents who cited “Making it easier to transact” as the biggest obstacle fell from 36% to 28%, while the number of respondents who believe the biggest obstacles are “Addressing how to manage fraud risk” and “Addressing consumer security concerns” each grew by more than 40%.

Biggest obstacles to mobile adoption

| | 2012 | 2013 |
|---|-------|-------|
| Addressing consumer security concerns with the platform | 19.4% | 27.7% |
| Addressing how to manage fraud risk | 14.2% | 20.1% |
| Making it easier for consumers to transact versus just shopping | 36.0% | 28.1% |
| Making it possible to take payments more efficiently | 12.6% | 14.3% |
| New payment types | 6.5% | 7.9% |
| Other | 11.3% | 2.0% |

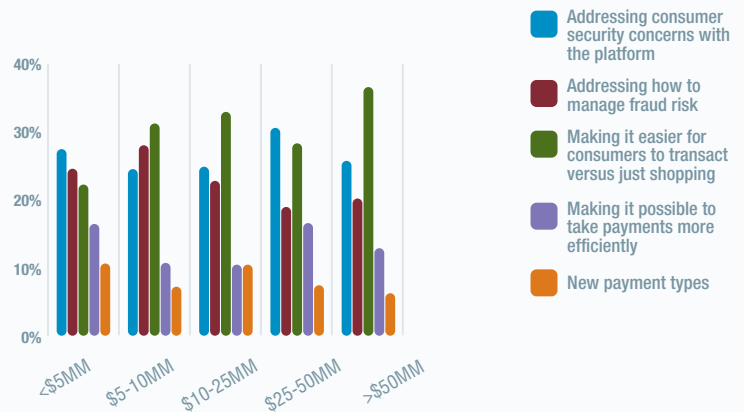
When we look at different types of businesses, it's apparent they have different opinions about the barriers to mobile adoption. For example, Merchants and Card Associations are mostly concerned with "Making it easier for consumers to transact," while Acquirers, Issuers and Service Providers are most likely to list security concerns as the greatest obstacle. Acquirers, Merchants and Service Providers are all most likely to list "Addressing how to manage fraud risk" as the third greatest obstacle, while Card Issuers are the group most likely to be worried about "New payment types."

Biggest obstacles to mobile adoption (type)



We also saw differentiation based on the size of the Merchant. The largest Merchants are most likely to view difficulty transacting as the biggest obstacle. Merchants with annual revenues less than \$5 million, however, are more likely to either indicate that consumer security concerns or fraud risk are the biggest obstacles.

Biggest obstacles to mobile adoption by revenue (merchants)



The focus on risk versus ease of transacting as the biggest hindrance to mobile adoption also varies between Merchants based on the types of goods or services they sell. Industries that are more likely to believe “Making it easier for consumers to transact” would have the biggest effect on mobile adoption include Apparel/Accessories, Books/Music/Video, Flowers/Gifts, Gaming, Office Supplies, and Toys/Hobbies. Industries most concerned with “Addressing consumer security concerns” are Computers/Electronics, Dating/Social Sites and Direct Response.

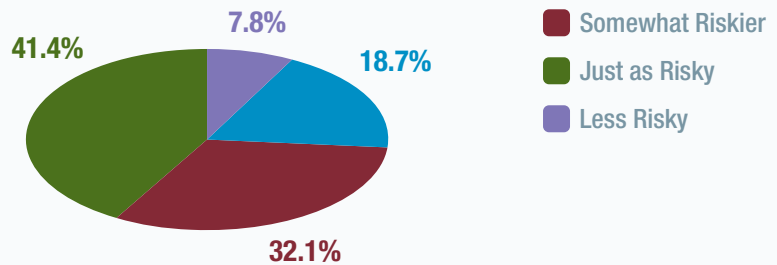
| Obstacles to mobile adoption by market segment | Consumer Security Concerns | How to Manage Fraud Risk | Transaction Ease for Consumers | Take Payments Efficiently | New Payment Types |
|--|----------------------------|--------------------------|--------------------------------|---------------------------|-------------------|
| Apparel/Accessories | 26.1% | 21.7% | 34.5% | 12.0% | 5.6% |
| Books/Music/Video | 26.5% | 20.5% | 41.0% | 7.2% | 4.8% |
| Computer/Electronics | 31.1% | 25.5% | 28.3% | 6.6% | 8.5% |
| Dating/Social Sites | 42.9% | 0% | 28.6% | 14.3% | 14.3% |
| Digital Goods | 30.0% | 18.3% | 33.3% | 10.0% | 8.3% |
| Direct Response | 71.4% | 0% | 0% | 14.3% | 14.3% |
| Financial Service | 26.3% | 31.6% | 15.8% | 15.8% | 10.5% |
| Flowers/Gifts | 26.7% | 15.6% | 35.6% | 13.3% | 8.9% |
| Food/Drug | 31.7% | 19.5% | 32.9% | 11.0% | 4.9% |
| Gaming | 22.2% | 25.0% | 41.7% | 5.6% | 5.6% |
| Hardware/Home Improvement | 30.6% | 16.5% | 31.8% | 11.8% | 9.4% |
| Health/Beauty | 28.1% | 19.8% | 32.3% | 14.6% | 5.2% |
| Housewares/Home Furnishings | 30.0% | 23.3% | 32.5% | 8.3% | 5.8% |
| Insurance | 12.5% | 25.0% | 37.5% | 25.0% | 0% |
| Jewelry | 25.0% | 19.8% | 33.3% | 16.7% | 5.2% |
| Mass Merchant | 24.0% | 20.0% | 32.0% | 16.0% | 8.0% |
| Money Movement | 0% | 0% | 33.3% | 33.3% | 33.3% |
| Office Supplies | 23.9% | 26.1% | 34.8% | 6.5% | 8.7% |
| Other Services | 23.6% | 25.5% | 23.6% | 20.0% | 7.3% |
| Specialty/Non-Apparel | 24.4% | 30.0% | 32.2% | 6.7% | 6.7% |
| Sporting Goods | 21.6% | 29.7% | 32.4% | 12.2% | 4.1% |
| Telecom | 25.0% | 30.6% | 33.3% | 5.6% | 5.6% |
| Toys/Hobbies | 23.8% | 18.8% | 40.0% | 12.5% | 5.0% |
| Travel | 35.0% | 15.0% | 35.0% | 15.0% | 0% |

Fraud Risk in the Mobile Channel

Being a relatively young channel, perceptions in terms of mobile's risk are still evolving. This is apparent when comparing findings from last year to this year—not only in terms of how risky organizations feel the mobile channel is, but also in the measures organizations are employing to handle this risk. The number of organizations that believe mobile is “Somewhat Riskier” than standard web eCommerce increased by one-third, up from 24% to 32%, while those that perceive the fraud risk associated with the mobile channel to be equal to fell to 41%.

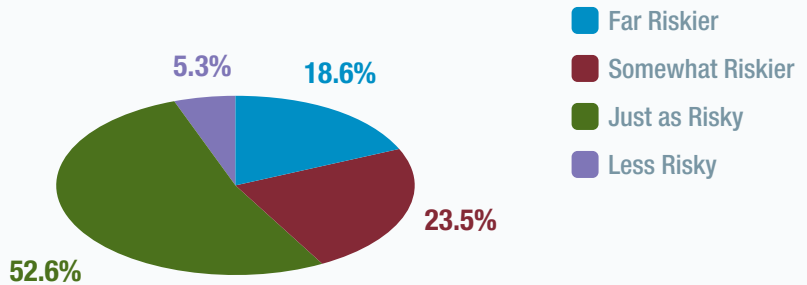
2013

Risk of mobile fraud



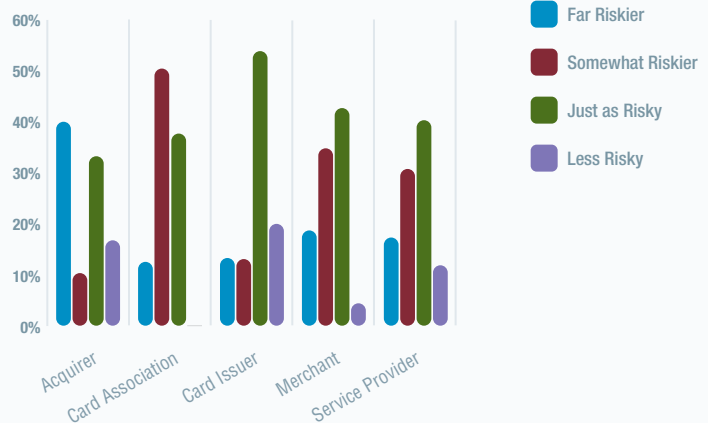
2012

Risk of mobile fraud



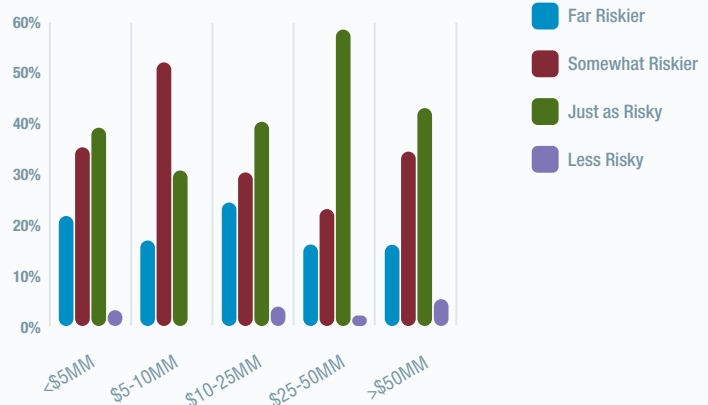
How risky an organization perceives the mobile channel to be—compared to standard web eCommerce—depends on the type of organization. Card Issuers, Merchants and Service Providers are all most inclined to indicate mobile is “Just as Risky” as standard web eCommerce, while Card Issuers are the group most likely to consider the mobile channel “Less Risky.” Half of Card Associations believe mobile is “Somewhat Riskier,” while Acquirers were most likely to state that mobile is “Far Riskier.”

Risk of mobile fraud (type)



Merchants overall tend to think the mobile channel is “Just as Risky” as standard web eCommerce, and this is true for every category of Merchant revenue except for the \$5 to \$10 million group, of which more than half believe mobile is “Somewhat Riskier.” While over 40% of the largest Merchants believe the mobile channel is “Just as Risky,” more than 51% believe the mobile channel is “Somewhat Riskier” or “Far Riskier” than standard web eCommerce.

Risk of mobile fraud by revenue (merchants)



The perception of how risky the mobile channel is compared to standard web eCommerce also differs by industry. Industries that are the most likely to state mobile is “Somewhat Riskier” than standard eCommerce include Computer/Electronics, Financial Services, Flowers/Gifts, Food/Drugs, Health/Beauty, Insurance and Money Movement.

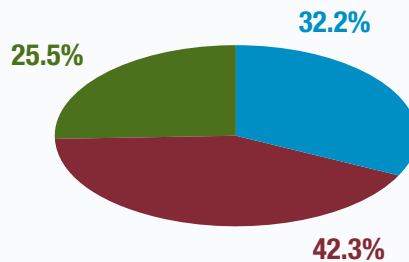
| Risk of mobile fraud by market segment | Far Riskier | Somewhat Riskier | Just As Risky | Less Risky |
|--|-------------|------------------|---------------|------------|
| Apparel/Accessories | 16.9% | 39.0% | 41.0% | 3.2% |
| Books/Music/Video | 15.7% | 39.8% | 41.0% | 3.6% |
| Computer/Electronics | 14.2% | 41.5% | 39.6% | 4.7% |
| Dating/Social Sites | 0% | 28.6% | 42.9% | 28.6% |
| Digital Goods | 13.3% | 35.0% | 43.3% | 8.3% |
| Direct Response | 14.3% | 28.6% | 57.1% | 0% |
| Financial Service | 21.1% | 42.1% | 31.6% | 5.3% |
| Flowers/Gifts | 11.1% | 42.2% | 40.0% | 6.7% |
| Food/Drug | 14.6% | 39.0% | 37.8% | 8.5% |
| Gaming | 11.1% | 41.7% | 41.7% | 5.6% |
| Hardware/Home Improvement | 8.2% | 43.5% | 43.5% | 4.7% |
| Health/Beauty | 16.7% | 43.8% | 34.4% | 5.2% |
| Housewares/Home Furnishings | 13.3% | 37.5% | 43.3% | 5.8% |
| Insurance | 0% | 75.0% | 25.0% | 0% |
| Jewelry | 17.7% | 37.5% | 38.5% | 6.3% |
| Mass Merchant | 12.0% | 44.0% | 44.0% | 0% |
| Money Movement | 33.3% | 33.3% | 33.3% | 0% |
| Office Supplies | 8.7% | 41.3% | 41.3% | 8.7% |
| Other Services | 18.2% | 32.7% | 41.8% | 7.3% |
| Specialty/Non-Apparel | 11.1% | 33.3% | 50.0% | 5.6% |
| Sporting Goods | 16.2% | 40.5% | 40.5% | 2.7% |
| Telecom | 13.9% | 36.1% | 41.7% | 8.3% |
| Toys/Hobbies | 15.0% | 33.8% | 43.8% | 7.5% |
| Travel | 25.0% | 30.0% | 45.0% | 0% |

Fraud Tools for Mobile eCommerce

Not only are organizations overall more likely to find that fraud risk associated with the mobile channel is higher than with standard web eCommerce, but three out of every four Merchants also believe the mobile channel requires additional or specialized tools for managing risk. The number of Merchants that think standard eCommerce fraud processes are enough for managing fraud risk in the mobile channel fell from 37% last year to 25.5% this year, while Merchants who think the mobile channel requires very specialized tools nearly doubled from 17% to 32%.

2013

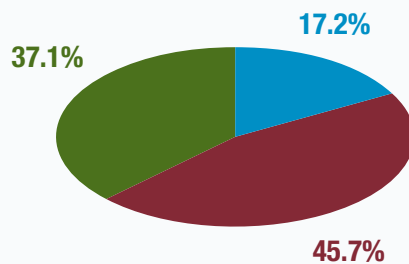
Specialized tools required to
prevent mobile fraud



- Yes, mobile requires very specialized fraud tools
- Yes, standard e-commerce fraud processes and tools cannot support it fully
- No, standard e-commerce fraud processes can support it

2012

Specialized tools required to
prevent mobile fraud



- Yes, mobile requires very specialized fraud tools
- Yes, standard e-commerce fraud processes and tools cannot support it fully
- No, standard e-commerce fraud processes can support it

Whether or not a respondent indicates that the mobile channel requires specialized fraud tools varies across Merchants of different size. The smallest (annual revenues less than \$5 million) and largest (annual revenue greater than \$50 million) Merchants were the groups most likely to answer “Yes,” that the mobile channel requires additional tools for managing risk, whereas Merchants with annual revenues between \$5 and \$10 million were the group most likely to answer “No.”

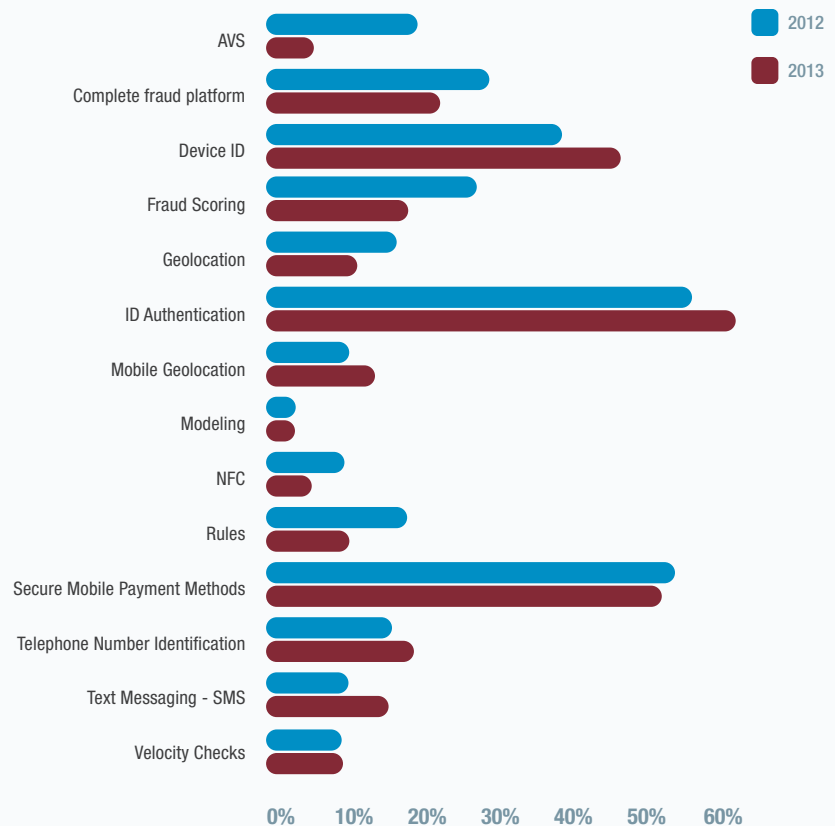
| Special tools to prevent mobile fraud by \$ | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|---|--------|----------|-----------|-----------|---------|
| Yes, mobile requires very specialized fraud tools | 37.6% | 17.6% | 37.0% | 30.4% | 28.8% |
| Yes, standard eCommerce fraud processes and tools cannot support it fully | 41.6% | 41.2% | 37.0% | 34.8% | 45.7% |
| No, standard eCommerce fraud processes can support it | 20.8% | 41.2% | 25.9% | 34.8% | 25.6% |

The types of goods or services a Merchant sells online also impacts their belief whether or not standard web fraud prevention tools and processes are enough to safely conduct mobile transactions. Less than 25% of Merchants in 15 different industries believe standard eCommerce fraud processes can support the mobile channel. These industries include: Books/Music/Video, Digital Goods, Dating/Social Sites, Direct Response, Financial Services, Food/Drug, Hardware/Home Improvement, Housewares/Home Furnishings, Mass Merchant, Office Supplies, Specialty Non-Apparel, Telecom, Toys/Hobbies and Travel.

| Special tools to prevent mobile fraud by market segment | Mobile Requires Very Specialized Fraud Tools | Yes, Standard eCommerce Tools/Processes Can Support Mobile Fully | No, Standard eCommerce Tools/Processes Can NOT Support Mobile Fully |
|---|--|--|---|
| Apparel/Accessories | 27.2% | 39.2% | 33.6% |
| Books/Music/Video | 30.6% | 47.2% | 22.2% |
| Computer/Electronics | 31.3% | 39.6% | 29.2% |
| Dating/Social Sites | 16.7% | 83.3% | 0% |
| Digital Goods | 33.3% | 48.1% | 18.5% |
| Direct Response | 66.7% | 33.3% | 0% |
| Financial Service | 33.3% | 44.4% | 22.2% |
| Flowers/Gifts | 33.3% | 38.1% | 28.6% |
| Food/Drug | 42.9% | 42.9% | 14.3% |
| Gaming | 21.4% | 42.9% | 35.7% |
| Hardware/Home Improvement | 26.3% | 57.9% | 15.8% |
| Health/Beauty | 23.5% | 49.0% | 27.5% |
| Housewares/Home Furnishings | 25.4% | 52.5% | 22.0% |
| Insurance | 0% | 50.0% | 50.0% |
| Jewelry | 30.4% | 39.1% | 30.4% |
| Mass Merchant | 30.0% | 50.0% | 20.0% |
| Money Movement | 50.0% | 0% | 50.0% |
| Office Supplies | 33.3% | 47.6% | 19.0% |
| Other Services | 42.1% | 36.8% | 21.1% |
| Specialty/Non-Apparel | 33.3% | 54.2% | 12.5% |
| Sporting Goods | 28.1% | 34.4% | 37.5% |
| Telecom | 38.9% | 38.9% | 22.2% |
| Toys/Hobbies | 24.2% | 51.5% | 24.2% |
| Travel | 23.1% | 61.5% | 15.4% |

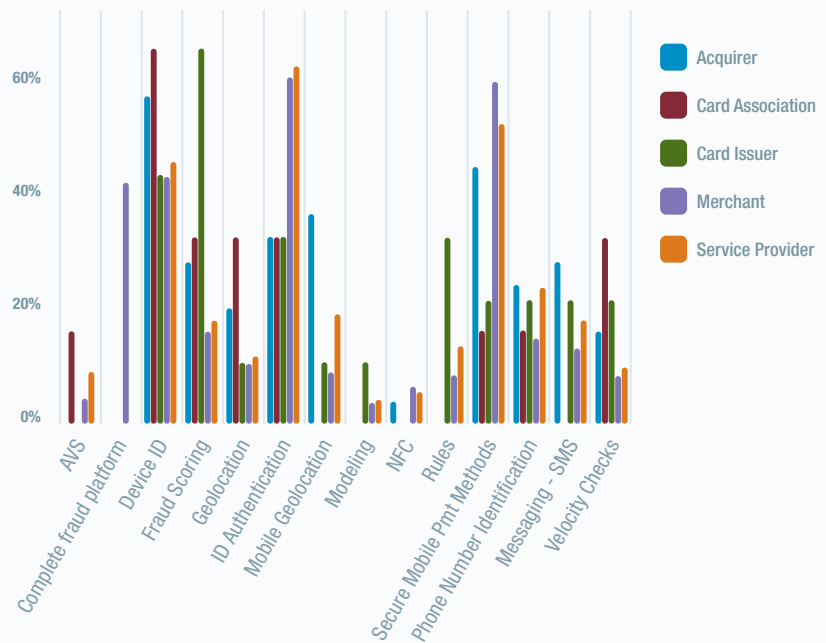
From the inaugural Mobile Payments & Fraud Survey to this year, not only did Merchants change their thinking about whether or not the mobile channel requires specialized tools, but their opinions on the most effective tools for preventing fraud in the mobile channel also evolved. ID Authentication is still the one tool organizations are most likely to rank in their top three, and preference for this tool even increased some from last year. Other tools that were likely to be ranked in an organization's top three this year were Device Identification, Mobile Geolocation, Telephone Number Identification, Text Messaging and Velocity Checks. Tools that were at least one third less likely to be identified as top technologies this year compared to last year are AVS, Fraud Scoring, NFC and Rules.

Best tool(s) for preventing mobile fraud



There are some differences in the distribution of favored fraud-prevention tools based on the type of organization. The only tool that is in the top three for Acquirers, Merchants, Service Providers, Card Associations and Issuers is Device Identification, while Merchants and Service Providers had the same top three: Device Identification, ID Authentication and Secure Mobile Payment Methods. Acquirers are likely to rank Mobile Geolocation in their top three, half of Card Associations rank standard Geolocation as a top-three tool, and two-thirds of Card Issuers rank Fraud Scoring in their top three. The only group with more than 10% of respondents ranking AVS as a top-three fraud-prevention technology is the Card Associations group.

Best tool(s) for preventing mobile fraud by type



There was some differentiation in the tools Merchants consider most effective based on the types of goods/services they sell online. The only Merchants that do not rank ID Authentication in their top three are Dating/Social Sites, but Dating/Social Sites are likely to include Telephone Number Identification as one of their top-three tools along with the Direct Response, Food/Drug, Insurance and Money Movement industries. Gaming was the only vertical market to put Text Messaging in their top three tools, while Dating/Social Sites and Insurance were the only verticals likely to rank Fraud Scoring and Geolocation in their top three.

| Top 3 tools for preventing mobile fraud by segment | AVS | Complete Fraud | Device ID | Fraud Scoring | Geo-location | ID Authentication | Mobile Geolocation | Modeling | NFC | Rules | Secure Mobile | TNI | Text Messaging | Velocity Checks |
|--|-------|----------------|-----------|---------------|--------------|-------------------|--------------------|----------|-------|-------|---------------|-------|----------------|-----------------|
| Apparel/Accessories | 4.8% | 44.4% | 41.3% | 13.5% | 10.3% | 67.5% | 8.7% | 5.6% | 6.3% | 9.5% | 44.4% | 17.5% | 13.5% | 12.7% |
| Books/Music/Video | 5.6% | 38.9% | 36.1% | 16.7% | 16.7% | 69.4% | 5.6% | 5.6% | 11.1% | 58.3% | 13.9% | 13.9% | 2.8% | |
| Computer/Electronics | 6.3% | 52.1% | 27.1% | 12.5% | 10.4% | 66.7% | 6.3% | 4.2% | 10.4% | 6.3% | 54.2% | 18.8% | 16.7% | 8.3% |
| Dating/Social Sites | 14.3% | 28.6% | 57.1% | 28.6% | 28.6% | 14.3% | 14.3% | 14.3% | 14.3% | 0% | 28.6% | 28.6% | 14.3% | 14.3% |
| Digital Goods | 3.7% | 29.6% | 29.6% | 11.1% | 7.4% | 70.4% | 22.2% | 3.7% | 7.4% | 7.4% | 48.1% | 25.9% | 22.2% | 11.1% |
| Direct Response | 14.3% | 42.9% | 14.3% | 28.6% | 0% | 57.1% | 0% | 0% | 14.3% | 0% | 57.1% | 42.9% | 14.3% | 14.3% |
| Financial Service | 11.1% | 22.2% | 66.7% | 11.1% | 22.2% | 33.3% | 11.1% | 0% | 11.1% | 11.1% | 44.4% | 22.2% | 22.2% | 11.1% |
| Flowers/Gifts | 9.5% | 47.6% | 28.6% | 9.5% | 19.0% | 52.4% | 14.3% | 9.5% | 4.8% | 4.8% | 61.9% | 19.0% | 14.3% | 4.8% |
| Food/Drug | 7.0% | 23.3% | 34.9% | 18.6% | 14.0% | 55.8% | 4.7% | 7.0% | 7.0% | 4.7% | 65.1% | 34.9% | 18.6% | 4.7% |
| Gaming | 7.1% | 14.3% | 21.4% | 14.3% | 14.3% | 78.6% | 21.4% | 7.1% | 14.3% | 7.1% | 35.7% | 28.6% | 35.7% | 0% |
| Hardware/Home Improvement | 0% | 52.6% | 34.2% | 15.8% | 10.5% | 60.5% | 7.9% | 5.3% | 7.9% | 10.5% | 63.2% | 13.2% | 10.5% | 7.9% |
| Health/Beauty | 5.9% | 39.2% | 31.4% | 21.6% | 15.7% | 60.8% | 11.8% | 9.8% | 7.8% | 3.9% | 54.9% | 11.8% | 15.7% | 9.8% |
| Housewares/Home Furnishings | 6.8% | 52.5% | 39.0% | 15.3% | 8.5% | 57.6% | 10.2% | 5.1% | 3.4% | 5.1% | 64.4% | 10.2% | 11.9% | 10.2% |
| Insurance | 0% | 0% | 50.0% | 50.0% | 50.0% | 100.0% | 0% | 0% | 0% | 0% | 0% | 50.0% | 0% | 0% |
| Jewelry | 2.2% | 54.3% | 37.0% | 8.7% | 19.6% | 67.4% | 13.0% | 6.5% | 4.3% | 4.3% | 52.2% | 10.9% | 15.2% | 4.3% |
| Mass Merchant | 0% | 40.0% | 60.0% | 10.0% | 10.0% | 70.0% | 0% | 10.0% | 0% | 0% | 60.0% | 10.0% | 30.0% | 0% |
| Money Movement | 0% | 0% | 50.0% | 0% | 0% | 50.0% | 50.0% | 50.0% | 0% | 0% | 0% | 50.0% | 0% | 50.0% |
| Office Supplies | 9.5% | 38.1% | 28.6% | 28.6% | 9.5% | 71.4% | 4.8% | 4.8% | 0% | 9.5% | 66.7% | 9.5% | 14.3% | 4.8% |
| Other Services | 10.3% | 35.9% | 43.6% | 23.1% | 12.8% | 56.4% | 15.4% | 2.6% | 10.3% | 7.7% | 48.7% | 15.4% | 7.7% | 10.3% |
| Specialty/Non-Apparel | 6.3% | 50.0% | 47.9% | 12.5% | 6.3% | 62.5% | 10.4% | 4.2% | 6.3% | 6.3% | 66.7% | 12.5% | 6.3% | 2.1% |
| Sporting Goods | 3.1% | 50.0% | 46.9% | 15.6% | 12.5% | 62.5% | 6.3% | 3.1% | 6.3% | 3.1% | 43.8% | 21.9% | 18.8% | 6.3% |
| Telecom | 5.6% | 50.0% | 38.9% | 22.2% | 16.7% | 44.4% | 11.1% | 5.6% | 11.1% | 11.1% | 50.0% | 11.1% | 5.6% | 16.7% |
| Toys/Hobbies | 6.1% | 42.4% | 30.3% | 12.1% | 12.1% | 69.7% | 9.1% | 6.1% | 9.1% | 6.1% | 69.7% | 9.1% | 15.2% | 3.0% |
| Travel | 0% | 46.2% | 46.2% | 23.1% | 7.7% | 69.2% | 7.7% | 0% | 0% | 7.7% | 61.5% | 15.4% | 0% | 15.4% |

Ability to Detect Mobile Devices in Transactions

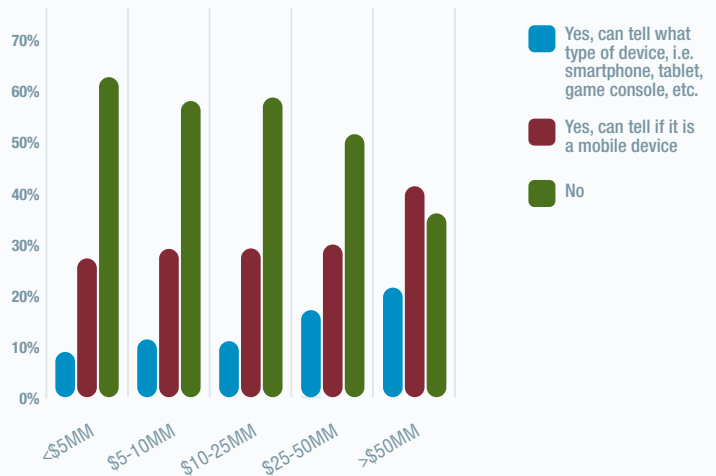
While more than half of respondents believe it is “Very Important” to be able to recognize that transactions originate from mobile devices and over 89% of respondents think this is at least “Important” or “Somewhat Important,” the ability of Merchants to do so is another story. Only half of Merchants said they can detect when transactions are initiated by a mobile device or tablet. Meanwhile, just 16% of Merchants can detect detail as to the type of device (smartphone, tablet, etc.), while 34% can only detect if the transaction is from a mobile device, not the specific type of device. The portion of Merchants that are able to detect a mobile device at all did improve: last year, more than 55% of Merchants indicated they were not able to recognize if transactions came from mobile devices.

Detect mobile device (merchants)

| | 2012 | 2013 |
|--|-------|-------|
| Yes, can detect type of device, (i.e. smart phone, tablet, game console, etc.) | 16.4% | 15.8% |
| Yes, can detect if mobile device | 28.4% | 34.2% |
| No, cannot detect | 55.2% | 50.0% |

A Merchant's ability to detect mobile devices is correlated to their annual revenues. Larger Merchants are more likely to be able to recognize mobile devices and to differentiate the type of mobile device. While half of Merchants overall are not able to recognize transactions coming from mobile devices, this is closer to 60% for Merchants with annual revenues less than \$25 million. For the largest Merchants, however, only 36% were not able to recognize mobile devices at all. What's more, 22% of Merchants with annual revenues greater than \$50 million are able to detect the type of mobile device being used compared to only 9% of Merchants with less than \$5 million in annual revenue.

Detect if originate from mobile device by revenue



The ability to recognize transactions from mobile devices also varies by the types of goods/services a Merchant sells online. More than half of Merchants in 17 of the 24 categories of goods/services sold online are able to detect mobile transactions including Digital Goods, Dating/Social Sites, Direct Response, Mass Merchant and Travel Merchants.

| Detect if originate from mobile device by market segment | Yes, And What Type of Mobile Device | Yes, But Only That is Mobile | No |
|--|-------------------------------------|------------------------------|-------|
| Apparel/Accessories | 18.4% | 31.2% | 50.4% |
| Books/Music/Video | 19.4% | 30.6% | 50.0% |
| Computer/Electronics | 25.0% | 27.1% | 47.9% |
| Dating/Social Sites | 50.0% | 50.0% | 0% |
| Digital Goods | 29.6% | 44.4% | 25.9% |
| Direct Response | 50.0% | 50.0% | 0% |
| Financial Service | 22.2% | 33.3% | 44.4% |
| Flowers/Gifts | 33.3% | 14.3% | 52.4% |
| Food/Drug | 23.8% | 28.6% | 47.6% |
| Gaming | 35.7% | 21.4% | 42.9% |
| Hardware/Home Improvement | 26.3% | 26.3% | 47.4% |
| Health/Beauty | 23.5% | 35.3% | 41.2% |
| Housewares/Home Furnishings | 20.3% | 28.8% | 50.8% |
| Insurance | 50.0% | 0% | 50.0% |
| Jewelry | 23.9% | 28.3% | 47.8% |
| Mass Merchant | 40.0% | 40.0% | 20.0% |
| Money Movement | 50.0% | 0% | 50.0% |
| Office Supplies | 28.6% | 33.3% | 38.1% |
| Other Services | 18.4% | 34.2% | 47.4% |
| Specialty/Non-Apparel | 20.8% | 20.8% | 58.3% |
| Sporting Goods | 18.8% | 43.8% | 37.5% |
| Telecom | 22.2% | 44.4% | 33.3% |
| Toys/Hobbies | 33.3% | 27.3% | 39.4% |
| Travel | 23.1% | 38.5% | 38.5% |

Mobile eCommerce - Today and Tomorrow

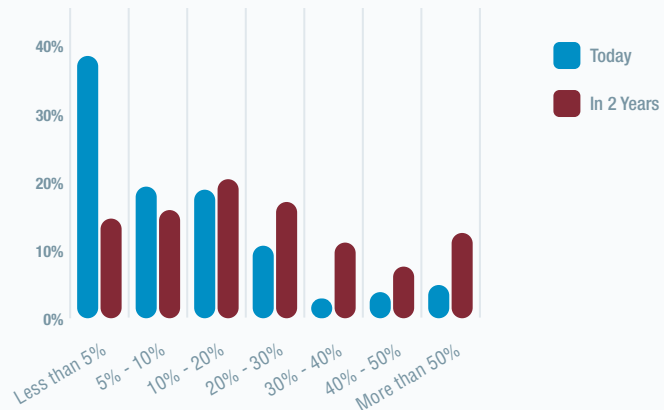
This section examines how companies currently operate in the mobile sales channel as well as their plans and projections for the next two years. This includes current and longitudinal findings on topics such as:

- Revenue from the mobile sales channel
- Support for mobile operating systems
- Mobile capabilities and infrastructure
- Tools deployed to fight mobile fraud

Revenue from the Mobile Sales Channel

While many organizations have big expectations for the mobile channel, it currently represents less than 10% of total business for 58% of organizations. However, this is more than last year and 31% of organizations expect to earn less than 10% of their business from the mobile channel two years from now. The number of organizations that earn 40% or more of their business through the mobile channel is also expected to grow from 9% of organizations today to 21% in two years.

**Percentage
of sales
in mobile
channel**



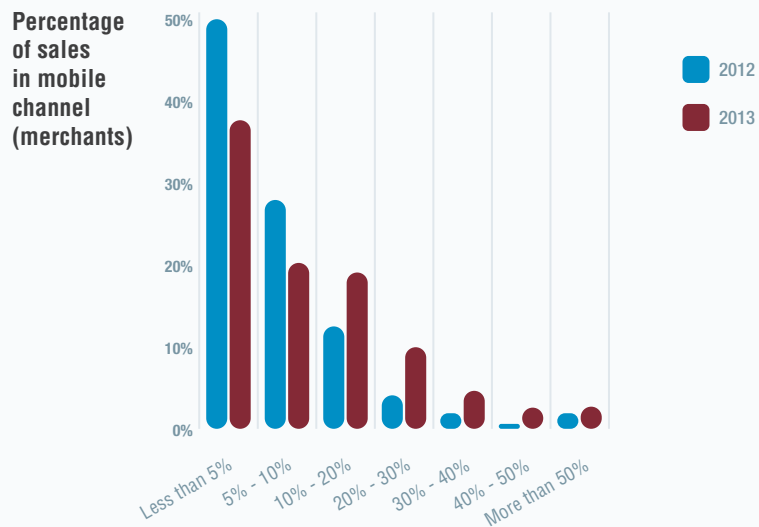
Broken down by type of business, Merchants and Service Providers are most likely to earn more than 10% of their business through the mobile sales channel today. More than half of Card Issuers and 63% of Card Associations indicated that mobile represents less than 5% of their business. All types of organizations are expecting mobile to become a larger share of their overall business, but Merchants and Service Providers have the biggest expectations.

Less than 15% of Merchants and Service Providers think that mobile will be less than 5% of their total business by 2015, while 10% of Merchants and 19% of Service Providers think the mobile channel will represent more than half of their business.

| Today % sales in mobile channel (type) | Acquirer | Card Association | Card Issuer | Merchant | Service Provider |
|--|----------|------------------|-------------|----------|------------------|
| Less than 5% | 34.3% | 62.5% | 52.9% | 38% | 39.0% |
| 5% - 10% | 37.1% | 12.5% | 11.8% | 20.8% | 15.9% |
| 10% - 20% | 14.3% | 25% | 23.5% | 19.6% | 17.9% |
| 20% - 30% | 14.3% | 0% | 11.8% | 10.5% | 11.0% |
| 30% - 40% | 0% | 0% | 0% | 5.0% | 0% |
| 40% - 50% | 0% | 0% | 0% | 2.9% | 6.7% |
| More than 50% | 0% | 0% | 0% | 3.2% | 9.5% |

| 2 yrs % sales in mobile channel (type) | Acquirer | Card Association | Card Issuer | Merchant | Service Provider |
|--|----------|------------------|-------------|----------|------------------|
| Less than 5% | 17.1% | 25.0% | 0% | 14.8% | 14.6% |
| 5% - 10% | 11.4% | 25.0% | 29.4% | 16.2% | 15.1% |
| 10% - 20% | 17.1% | 12.5% | 29.4% | 22.2% | 18.2% |
| 20% - 30% | 25.7% | 25.0% | 11.8% | 17.1% | 16.2% |
| 30% - 40% | 14.3% | 12.5% | 11.8% | 12.0% | 9.7% |
| 40% - 50% | 5.7% | 0% | 11.8% | 7.9% | 7.7% |
| More than 50% | 8.6% | 0% | 5.9% | 9.8% | 18.5% |

The Mobile Payments & Fraud Survey reveals that the mobile channel has grown overall from last year, and this is especially true for Merchants. Last year, half of Merchants indicated that the mobile sales channel represented 5% or less of their total business, while only 10% stated that more than 20% of their business comes through the mobile sales channel. This year, the number of Merchants with less than 5% of their overall business coming from the mobile channel fell from half of all Merchants to 38%, a decrease of 24% in one year. The number of Merchants that earn 20% or more of their business through the mobile sales channel more than doubled from 10% last year to 21% this year.



There is also differentiation of response to this question across Merchant categories. Industries where Merchants are likely to earn more than half of their business via the mobile channel are Financial Services and Money Movement. However, more than one third of Merchants in eight industries earn less than 5% of their business through the mobile channel currently. This includes Direct Response, Flowers/Gifts, Food/Drug, Mass Merchants, Specialty Non-Apparel and Other Services. Merchants from all industries expect mobile to grow as a larger portion of total business in two years. The portion of Merchants that think mobile will be less than 5% of their business in 2 years is less than 25% for all 24 categories of goods/services sold, while 18 groups are at less than 15% and 6 groups are at or below 10%.

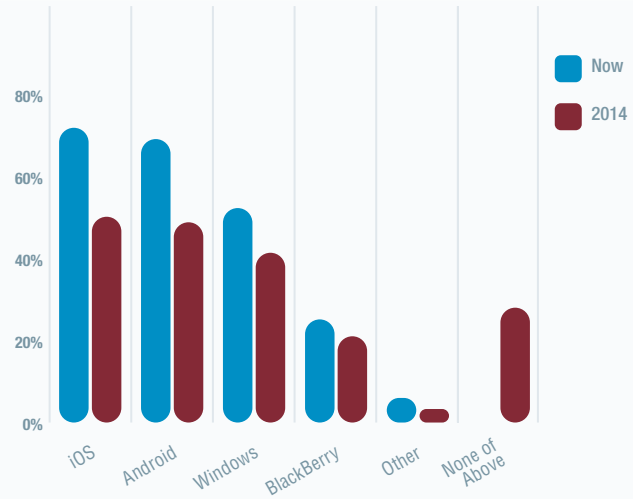
| Today - % sales in mobile channel by market segment | <5% | 5-10% | 10-20% | 20-30% | 30-40% | 40-50% | >50% |
|---|-------|-------|--------|--------|--------|--------|-------|
| Apparel/Accessories | 31.5% | 22.1% | 23.7% | 10.7% | 7.3% | 2.5% | 2.2% |
| Books/Music/Video | 32.7% | 25.0% | 20.2% | 6.7% | 7.7% | 5.8% | 1.9% |
| Computer/Electronics | 31.9% | 27.0% | 19.1% | 9.2% | 4.3% | 5.0% | 3.5% |
| Dating/Social Sites | 12.5% | 50.0% | 25.0% | 0% | 12.5% | 0% | 0% |
| Digital Goods | 32.9% | 26.8% | 14.6% | 11.0% | 9.8% | 1.2% | 3.7% |
| Direct Response | 33.3% | 44.4% | 22.2% | 0% | 0% | 0% | 0% |
| Financial Service | 30.8% | 15.4% | 15.4% | 15.4% | 7.7% | 0% | 15.4% |
| Flowers/Gifts | 33.9% | 28.8% | 16.9% | 8.5% | 6.8% | 5.1% | 0% |
| Food/Drug | 45.0% | 27.0% | 22.0% | 2.0% | 4.0% | 0% | 0% |
| Gaming | 30.6% | 32.7% | 14.3% | 6.1% | 8.2% | 2.0% | 6.1% |
| Hardware/Home Improvement | 36.6% | 24.1% | 21.4% | 7.1% | 6.3% | 2.7% | 1.8% |
| Health/Beauty | 27.4% | 25.9% | 22.2% | 15.6% | 6.7% | 2.2% | 0% |
| Housewares/Home Furnishings | 32.7% | 26.8% | 20.8% | 10.1% | 7.1% | 2.4% | 0% |
| Insurance | 16.7% | 25.0% | 33.3% | 16.7% | 8.3% | 0% | 0% |
| Jewelry | 31.1% | 20.0% | 20.7% | 14.8% | 10.4% | 2.2% | 0.7% |
| Mass Merchant | 38.2% | 35.3% | 11.8% | 8.8% | 0% | 2.9% | 2.9% |
| Money Movement | 25.0% | 25.0% | 25.0% | 0% | 0% | 0% | 25.0% |
| Office Supplies | 22.2% | 38.1% | 17.5% | 9.5% | 9.5% | 1.6% | 1.6% |
| Other Services | 39.1% | 20.3% | 18.8% | 12.5% | 3.1% | 1.6% | 4.7% |
| Specialty/Non-Apparel | 38.0% | 24.1% | 15.7% | 10.2% | 5.6% | 3.7% | 2.8% |
| Sporting Goods | 26.0% | 33.3% | 22.9% | 10.4% | 5.2% | 2.1% | 0% |
| Telecom | 30.0% | 30.0% | 12.5% | 7.5% | 7.5% | 5.0% | 7.5% |
| Toys/Hobbies | 32.7% | 31.7% | 18.3% | 6.7% | 4.8% | 3.8% | 1.9% |
| Travel | 42.3% | 15.4% | 11.5% | 11.5% | 7.7% | 7.7% | 3.8% |

| 2 years - % sales in mobile channel by market segment | <5% | 5-10% | 10-20% | 20-30% | 30-40% | 40-50% | >50% |
|---|-------|-------|--------|--------|--------|--------|-------|
| Apparel/Accessories | 10.7% | 17.4% | 22.1% | 18.3% | 13.6% | 9.8% | 8.2% |
| Books/Music/Video | 11.5% | 17.3% | 24.0% | 13.5% | 15.4% | 6.7% | 11.5% |
| Computer/Electronics | 13.5% | 17.0% | 22.0% | 16.3% | 12.8% | 9.9% | 8.5% |
| Dating/Social Sites | 0% | 12.5% | 0% | 62.5% | 12.5% | 0% | 12.5% |
| Digital Goods | 12.2% | 18.3% | 18.3% | 19.5% | 11.0% | 9.8% | 11.0% |
| Direct Response | 22.2% | 11.1% | 44.4% | 11.1% | 11.1% | 0% | 0% |
| Financial Service | 15.4% | 11.5% | 19.2% | 19.2% | 3.8% | 15.4% | 15.4% |
| Flowers/Gifts | 6.8% | 23.7% | 27.1% | 15.3% | 8.5% | 8.5% | 10.2% |
| Food/Drug | 18.0% | 21.0% | 21.0% | 20.0% | 12.0% | 6.0% | 2.0% |
| Gaming | 10.2% | 20.4% | 28.6% | 12.2% | 8.2% | 14.3% | 6.1% |
| Hardware/Home Improvement | 12.5% | 20.5% | 21.4% | 17.0% | 11.6% | 8.9% | 8.0% |
| Health/Beauty | 11.9% | 13.3% | 25.2% | 17.8% | 12.6% | 11.1% | 8.1% |
| Housewares/Home Furnishings | 9.5% | 22.6% | 20.8% | 17.9% | 13.7% | 7.1% | 8.3% |
| Insurance | 8.3% | 8.3% | 16.7% | 41.7% | 8.3% | 0% | 16.7% |
| Jewelry | 15.6% | 12.6% | 19.3% | 15.6% | 14.1% | 11.9% | 11.1% |
| Mass Merchant | 20.6% | 26.5% | 17.6% | 11.8% | 11.8% | 8.8% | 2.9% |
| Money Movement | 0% | 0% | 50.0% | 25.0% | 0% | 0% | 25.0% |
| Office Supplies | 6.3% | 12.7% | 30.2% | 19.0% | 11.1% | 12.7% | 7.9% |
| Other Services | 10.9% | 12.5% | 23.4% | 25.0% | 10.9% | 4.7% | 12.5% |
| Specialty/Non-Apparel | 16.7% | 19.4% | 12.0% | 21.3% | 11.1% | 7.4% | 12.0% |
| Sporting Goods | 11.5% | 13.5% | 28.1% | 20.8% | 12.5% | 7.3% | 6.3% |
| Telecom | 10.0% | 15.0% | 22.5% | 22.5% | 12.5% | 5.0% | 12.5% |
| Toys/Hobbies | 12.5% | 20.2% | 22.1% | 19.2% | 10.6% | 5.8% | 9.6% |
| Travel | 11.5% | 7.7% | 26.9% | 19.2% | 7.7% | 15.4% | 11.5% |

Support for Mobile OS Platforms

About 7 out of every 10 organizations currently support the Apple iOS and Android operating systems, while more than one half support Windows and more than one quarter support BlackBerry. In terms of planning to add support or features for these mobile operating systems in 2014, more than 40% of respondents plan to add support for Windows, while only 20% plan to add support for BlackBerry.

**Mobile OS
support,
today and
in 2 years**



When broken down by the type of business, we see that Merchants are actually less likely to support Android than Acquirers, Issuers and Service Providers at 68%. Apple's iOS is the most likely to be supported by Merchants today as it is supported by 72%. Surprisingly, a significant share of Merchants—44%—indicated they do not plan to add support to any mobile operating systems in 2014. Thirty percent of Merchants, however, plan to add support for Windows in 2014.

| Current mobile OS support (type) | Acquirer | Card Association | Card Issuer | Merchant | Service Provider |
|----------------------------------|----------|------------------|-------------|----------|------------------|
| Android | 85.7% | 62.5% | 88.2% | 68.3% | 72.6% |
| BlackBerry | 17.1% | 25.0% | 17.6% | 24.7% | 29.5% |
| iOS | 71.4% | 50.0% | 88.2% | 71.9% | 75.4% |
| Windows | 40.0% | 62.5% | 52.9% | 53.5% | 53.6% |
| Other | 2.9% | 25.0% | 11.8% | 6.1% | 6.9% |

| Plan to support mobile OS in 2014 (type) | Acquirer | Card Association | Card Issuer | Merchant | Service Provider |
|--|----------|------------------|-------------|----------|------------------|
| Android | 77.1% | 62.5% | 82.4% | 33.5% | 74.4% |
| BlackBerry | 22.9% | 37.5% | 23.5% | 15.8% | 31.3% |
| iOS | 85.7% | 75.0% | 88.2% | 33.6% | 77.2% |
| Windows | 60.0% | 75.0% | 64.7% | 30.1% | 61.3% |
| Other | 2.9% | 12.5% | 5.9% | 3.9% | 4.1% |
| None of above | 2.9% | 0% | 0% | 44.2% | 5.6% |

There are also differences in the mobile operating systems a Merchant supports based on their annual revenues. In short, larger Merchants are more likely to support each of the major mobile operating systems. 75% of Merchants with annual revenues greater than \$50 million support Android, 83% support iOS and 56% support Windows currently, compared to 57%, 54% and 46% respectively for Merchants with annual revenues less than \$5 million.

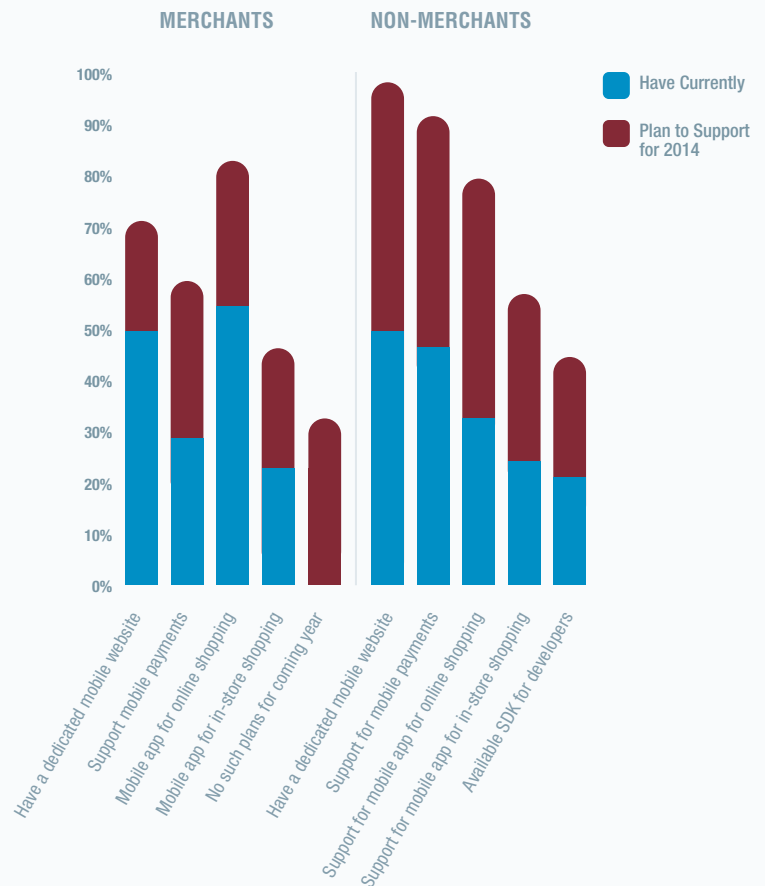
| Current mobile OS support (merchants) | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|---------------------------------------|--------|----------|-----------|-----------|---------|
| Android | 57.3% | 63.2% | 65.0% | 64.6% | 74.9% |
| BlackBerry | 18.7% | 21.1% | 21.7% | 18.8% | 29.2% |
| iOS | 54.4% | 60.5% | 71.1% | 60.4% | 82.8% |
| Windows | 45.6% | 50.0% | 55.0% | 60.4% | 56.4% |
| Other | 10.5% | 5.3% | 5.0% | 2.1% | 4.9% |

| Plan to support mobile OS in 2014 (merchants) | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|---|--------|----------|-----------|-----------|---------|
| Android | 41.5% | 39.5% | 28.3% | 33.3% | 30.0% |
| BlackBerry | 16.4% | 18.4% | 10.0% | 20.8% | 15.5% |
| iOS | 38.0% | 36.8% | 40.0% | 35.4% | 30.0% |
| Windows | 31.0% | 28.9% | 23.3% | 29.2% | 31.1% |
| Other | 2.3% | 2.6% | 5.0% | 2.1% | 4.9% |
| None of above | 35.7% | 39.5% | 46.7% | 47.9% | 47.7% |

Mobile Capabilities and Infrastructure

Organizations currently support a number of efforts to enhance their company's mobile strategy, while there are efforts that several organizations plan to support in 2014. The two most common efforts in place today with Merchants are supporting a mobile app for online shopping (54%) and offering a dedicated mobile website (49%). The efforts the most Merchants are planning to support in 2014 are support for mobile payments (30%) and mobile apps for online shopping (28%). For Acquirers, Service Providers, Card Associations and Issuers the most common efforts supported today are dedicated mobile websites (48%) and support for mobile payments (45%). These two efforts are also the ones most likely to be supported by these organizations in 2014.

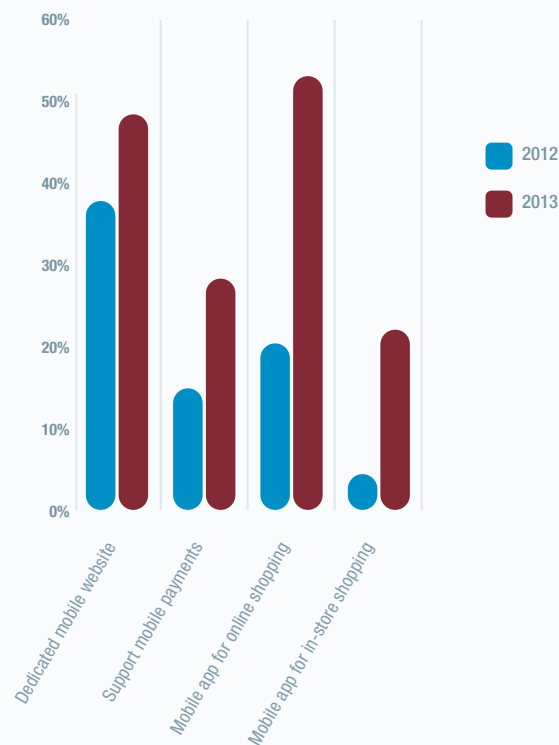
Mobile capabilities and planned initiatives



Compared to last year, there are several notable changes for Merchants in this regard. First, each of the efforts supported by Merchants increased from year-to-year. The percentage of Merchants that offer a mobile app for online shopping more than doubled from 21% to 54%. The portion of Merchants that offer dedicated mobile websites also grew, but not as rapidly. As a result, more Merchants have mobile apps than have dedicated mobile sites, whereas last year, dedicated mobile sites were more common.

There is also a significant increase in Merchants that currently support mobile payments at the point-of-sale and mobile apps for in-store shopping. This is likely influenced by the growing representation of Merchants that operate in the brick-and-mortar channel, but the growth is significant nonetheless. The share of Merchants that currently support mobile payments at the point-of-sale nearly doubled from 15% to 29%. Meanwhile, Merchants that currently support mobile apps for in-store shopping more than quadrupled from 5% last year 23% this year. As mobile wallets and mobile point-of-sale payment methods like Google Wallet, Isis, PayPal, Visa's V.me, MasterCard's MasterPass and others continue to develop, more Merchants are supporting these payment methods. More Merchants are also utilizing mobile technology within their retail stores, offering mobile apps that can increase sales and conversion through mobile coupons, loyalty programs and other features geared toward in-store shopping.

Current efforts to enhance mobile (merchants)



For organizations other than Merchants, the current and planned efforts to support mobile strategies are a bit different. The most common effort in place today for Acquirers, Card Associations and Issuers is support for mobile payments, while Service Providers are most likely to support dedicated mobile websites. Card Associations have put the biggest emphasis on mobile apps with 63% supporting mobile apps for in-store shopping and 63% supporting mobile apps for online shopping. This is likely influenced by the mobile wallet efforts from the major Card Associations including Visa's V.me, MasterCard's MasterPass, and American Express' Serve. In terms of planned efforts for 2014, more than 80% of Card Associations are focused on increasing their support for mobile payments, while more than half of Acquirers are planning to add support for online shopping mobile apps in 2014. In terms of planned efforts for 2014, more than 80% of Card Associations are focused on increasing their support for mobile payments while more than half of Acquirers are planning to add support for online shopping mobile apps in 2014.

| Current mobile capabilities (type) | Acquirer | Card Association | Card Issuer | Service Provider |
|--|----------|------------------|-------------|------------------|
| Dedicated Mobile Websites | 31.4% | 50.0% | 52.9% | 49.0% |
| Support for mobile payments | 60.0% | 62.5% | 58.8% | 42.3% |
| Support for mobile app for online shopping | 42.9% | 62.5% | 23.5% | 38.5% |
| Support for mobile app for in-store shopping | 34.3% | 62.5% | 5.9% | 22.6% |
| Available SDK for developers | 28.6% | 25.0% | 11.8% | 19.2% |

| Planned mobile capabilities (type) | Acquirer | Card Association | Card Issuer | Service Provider |
|--|----------|------------------|-------------|------------------|
| Dedicated Mobile Websites | 42.9% | 50.0% | 41.2% | 49.7% |
| Support for mobile payments | 48.6% | 50.0% | 82.4% | 43.8% |
| Support for mobile app for online shopping | 51.4% | 62.5% | 47.1% | 37.4% |
| Support for mobile app for in-store shopping | 34.3% | 62.5% | 41.2% | 30.8% |
| Available SDK for developers | 34.3% | 62.5% | 5.9% | 22.3% |

More than half of Merchants currently offer a dedicated mobile website or a mobile app for online shopping, with larger Merchants much more likely to offer one or both of these. Fifty-five percent of Merchants with annual revenues greater than \$50 million currently offer a dedicated mobile website, while 66% support a mobile app for online shopping. By comparison, only 40% of Merchants with annual revenues less than \$5 million offer a dedicated mobile website, while less than one-third support a mobile app for online shopping. The largest Merchants are also nearly three-times more likely to support a mobile app for in-store shopping.

Only 40% of Merchants with annual revenues less than \$5 million have dedicated mobile websites today, and only 19% plan to add them in 2014. Smaller Merchants tend to be more focused on mobile apps rather than dedicated mobile websites, as 34% plan to add support for a mobile app for online shopping in 2014. Larger Merchants, on the other hand, are more consistent in planning support for mobile. Twenty-four percent of Merchants with annual revenues greater than \$50 million plan to setup a dedicated mobile website in 2014, while 25% plan to launch a mobile app for online shopping. Also, keep in mind that more than half of Merchants this size already support these efforts today.

| Current mobile capabilities (merchants) | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|--|--------|----------|-----------|-----------|---------|
| Dedicated Mobile Websites | 39.8% | 42.1% | 41.7% | 47.9% | 54.5% |
| Support for mobile payments | 33.9% | 21.1% | 31.7% | 29.2% | 26.4% |
| Support for mobile app for online shopping | 32.7% | 36.8% | 58.3% | 41.7% | 65.7% |
| Support for mobile app for in-store shopping | 10.5% | 7.9% | 23.3% | 10.4% | 30.8% |

| Planned mobile capabilities (merchants) | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|--|--------|----------|-----------|-----------|---------|
| Dedicated Mobile Websites | 18.7% | 10.5% | 20.0% | 22.9% | 23.7% |
| Support for mobile payments | 25.7% | 23.7% | 21.7% | 25.0% | 34.3% |
| Support for mobile app for online shopping | 33.9% | 31.6% | 26.7% | 35.4% | 24.5% |
| Support for mobile app for in-store shopping | 18.7% | 18.4% | 20.0% | 18.8% | 26.7% |
| No plans for 2014 | 30.4% | 47.4% | 33.3% | 25.0% | 31.6% |

There is additional differentiation between Merchant types and the current efforts they support to enhance their mobile strategies. The categories of Merchants most likely to offer a dedicated mobile website today are those in the Gaming, Mass Merchant and Money Movement verticals. There are 11 categories of goods/ services where at least two-thirds of Merchants currently support a mobile app for online shopping. These include Computers/ Electronics, Dating/Social Sites, Digital Goods, Financial Services, Gaming, Health/Beauty, Sporting Goods, Toys/Hobbies and Travel.

| Current mobile capabilities by market segment (merchants) | Dedicated Mobile Site | Support Mobile Payments | Mobile App Online | Mobile App In-Store |
|---|-----------------------|-------------------------|-------------------|---------------------|
| Apparel/Accessories | 49.7% | 24.5% | 59.6% | 25.8% |
| Books/Music/Video | 56.3% | 27.2% | 62.1% | 35.9% |
| Computer/Electronics | 51.4% | 32.9% | 71.4% | 37.1% |
| Dating/Social Sites | 25.0% | 12.5% | 87.5% | 25.0% |
| Digital Goods | 56.1% | 29.3% | 68.3% | 31.7% |
| Direct Response | 33.3% | 33.3% | 55.6% | 44.4% |
| Financial Service | 46.2% | 42.3% | 80.8% | 34.6% |
| Flowers/Gifts | 55.9% | 37.3% | 55.9% | 33.9% |
| Food/Drug | 48.0% | 34.7% | 64.3% | 31.6% |
| Gaming | 61.2% | 24.5% | 85.7% | 46.9% |
| Hardware/Home Improvement | 51.4% | 32.1% | 63.3% | 37.6% |
| Health/Beauty | 53.0% | 30.6% | 71.6% | 35.1% |
| Housewares/Home Furnishings | 55.4% | 27.4% | 59.5% | 34.5% |
| Insurance | 41.7% | 41.7% | 75.0% | 25.0% |
| Jewelry | 49.6% | 27.4% | 65.2% | 36.3% |
| Mass Merchant | 67.6% | 32.4% | 79.4% | 41.2% |
| Money Movement | 75.0% | 50.0% | 50.0% | 50.0% |
| Office Supplies | 49.2% | 27.0% | 63.5% | 39.7% |
| Other Services | 43.8% | 32.8% | 57.8% | 23.4% |
| Specialty/Non-Apparel | 56.7% | 33.7% | 49.0% | 25.0% |
| Sporting Goods | 52.6% | 26.3% | 73.7% | 31.6% |
| Telecom | 50.0% | 35.0% | 62.5% | 27.5% |
| Toys/Hobbies | 56.7% | 27.9% | 68.3% | 35.6% |
| Travel | 46.2% | 46.2% | 69.2% | 34.6% |

| Planned mobile capabilities by market segment (merchants) | Dedicated Mobile Site | Support Mobile Payments | Mobile App Online | Mobile App In-Store | No Plans |
|--|--------------------------|----------------------------|----------------------|------------------------|----------|
| Apparel/Accessories | 18.8% | 31.5% | 29.3% | 27.7% | 31.8% |
| Books/Music/Video | 22.3% | 28.2% | 26.2% | 23.3% | 39.8% |
| Computer/Electronics | 25.0% | 35.0% | 26.4% | 25.0% | 30.0% |
| Dating/Social Sites | 37.5% | 62.5% | 37.5% | 37.5% | 0% |
| Digital Goods | 25.6% | 35.4% | 20.7% | 22.0% | 32.9% |
| Direct Response | 33.3% | 33.3% | 11.1% | 22.2% | 11.1% |
| Financial Service | 38.5% | 46.2% | 38.5% | 30.8% | 19.2% |
| Flowers/Gifts | 25.4% | 33.9% | 33.9% | 30.5% | 30.5% |
| Food/Drug | 22.4% | 33.7% | 34.7% | 30.6% | 27.6% |
| Gaming | 18.4% | 26.5% | 32.7% | 34.7% | 26.5% |
| Hardware/Home Improvement | 25.7% | 34.9% | 24.8% | 23.9% | 32.1% |
| Health/Beauty | 24.6% | 36.6% | 29.9% | 22.4% | 25.4% |
| Housewares/Home Furnishings | 23.8% | 31.0% | 26.8% | 21.4% | 34.5% |
| Insurance | 50.0% | 41.7% | 33.3% | 25.0% | 8.3% |
| Jewelry | 18.5% | 34.8% | 27.4% | 27.4% | 34.1% |
| Mass Merchant | 23.5% | 32.4% | 17.6% | 35.3% | 35.3% |
| Money Movement | 0% | 0% | 25.0% | 0% | 75.0% |
| Office Supplies | 23.8% | 46.0% | 30.2% | 25.4% | 22.2% |
| Other Services | 28.1% | 21.9% | 37.5% | 34.4% | 28.1% |
| Specialty/Non-Apparel | 27.9% | 33.7% | 31.7% | 21.2% | 34.6% |
| Sporting Goods | 23.2% | 34.7% | 27.4% | 16.8% | 34.7% |
| Telecom | 27.5% | 35.0% | 30.0% | 32.5% | 25.0% |
| Toys/Hobbies | 25.0% | 35.6% | 24.0% | 24.0% | 32.7% |
| Travel | 23.1% | 30.8% | 42.3% | 23.1% | 38.5% |

Tools Deployed to Combat Mobile Fraud

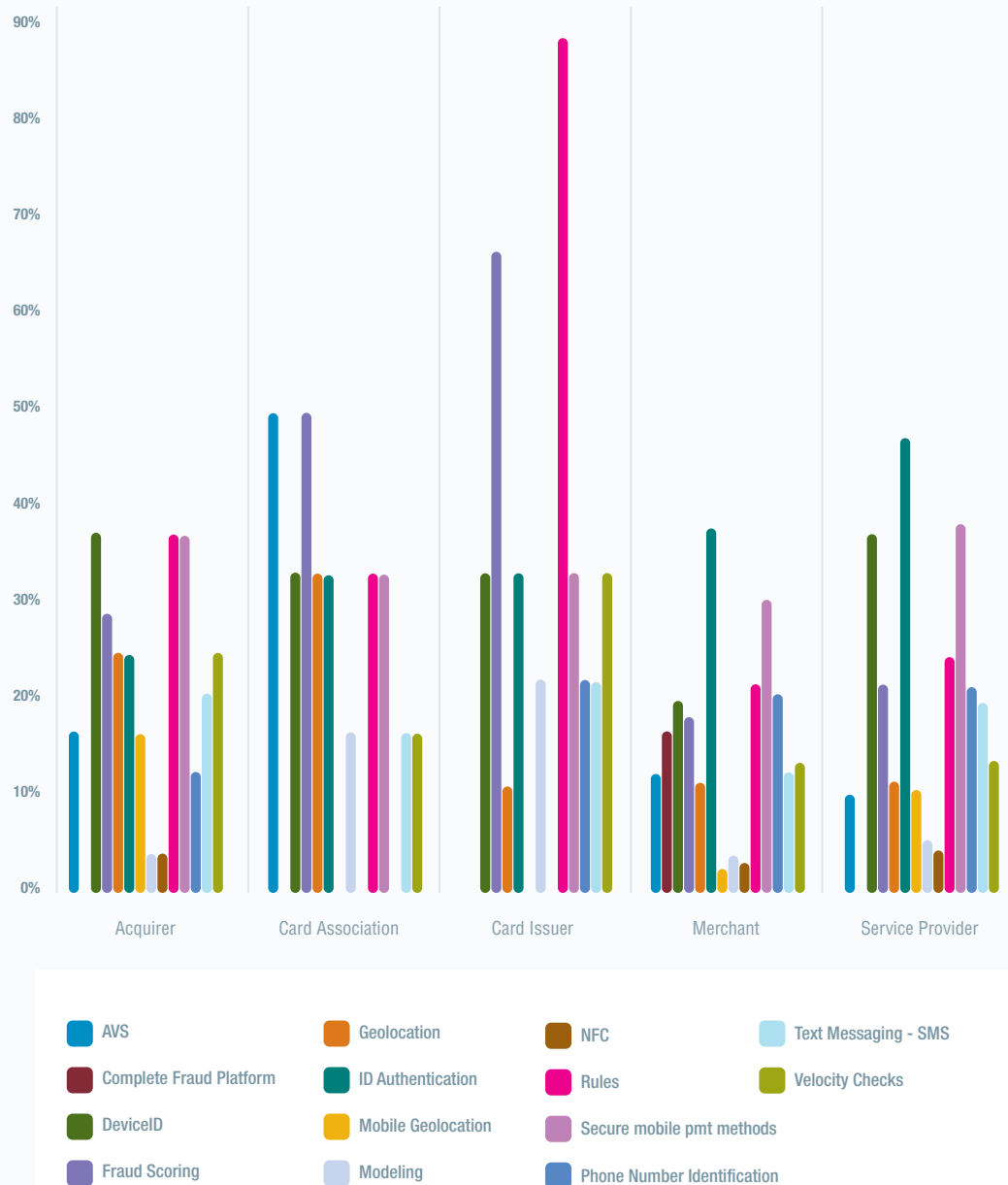
Merchants and merchant services businesses are using a mix of tools, techniques and services to mitigate fraud in the mobile channel. Compared to benchmarks set last year, tools that showed increased use include Device Identification, ID Authentication, Mobile Geolocation, NFC, Telephone Number Identification and Text Messaging. The tools that exhibited the biggest drop in use to prevent mobile fraud were AVS, with a 47% decline year-to-year, and Complete Fraud Platforms and Modeling, with each declining by about one-third from last year's numbers.

Tools and services used to prevent mobile fraud

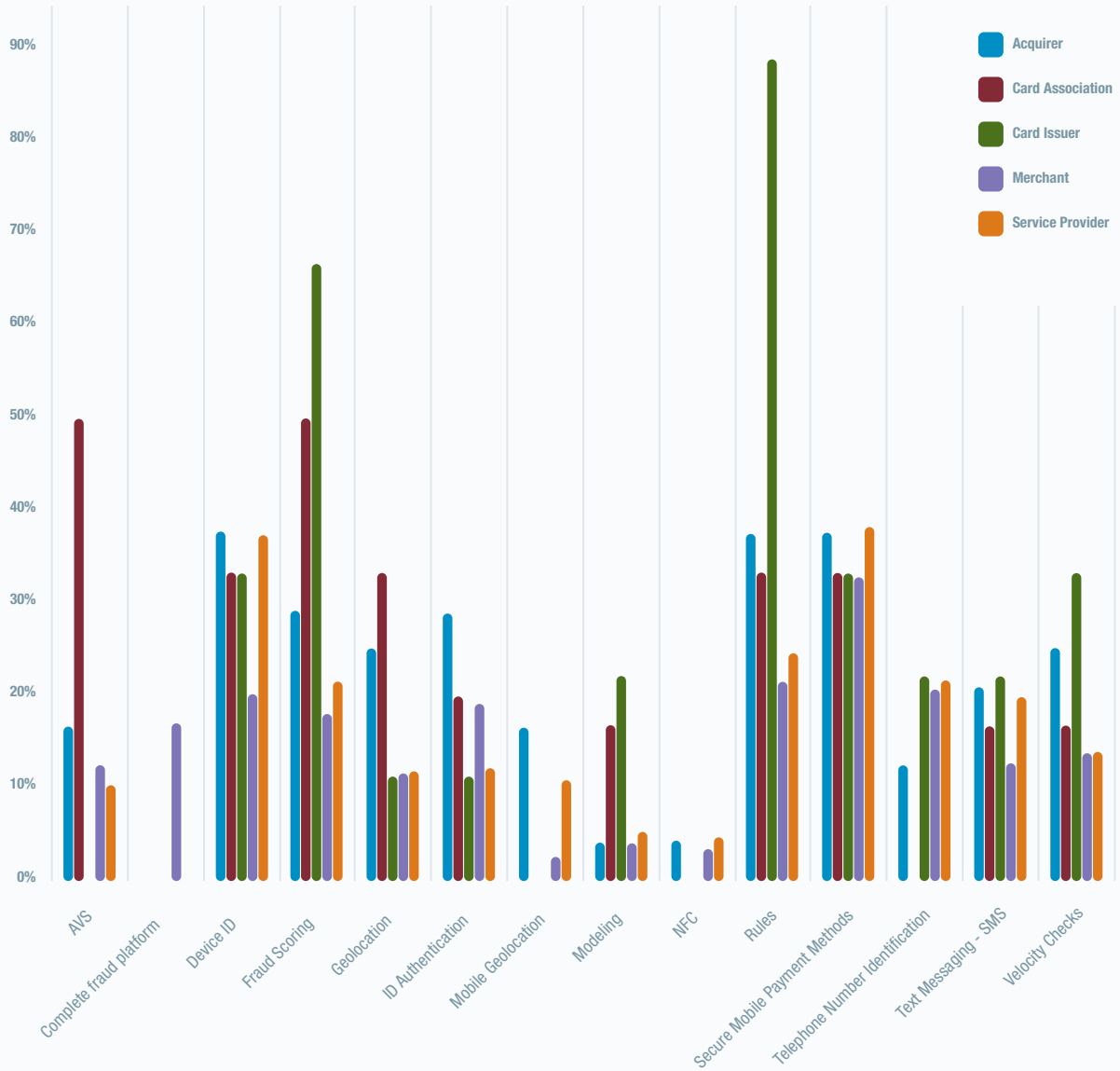
| | 2012 | 2013 |
|---|-------|-------|
| AVS | 22.7% | 12.0% |
| Complete fraud platform (includes several of the technologies listed) | 12.7% | 8.7% |
| Device ID | 23.2% | 28.2% |
| Fraud Scoring | 22.1% | 21.2% |
| Geolocation | 14.4% | 12.4% |
| ID Authentication | 32.0% | 41.7% |
| Mobile Geolocation | 3.9% | 6.5% |
| Modeling | 7.7% | 5.0% |
| NFC | 2.2% | 3.7% |
| Rules | 28.7% | 24.9% |
| Secure Mobile Payment Methods | 31.5% | 35.2% |
| Telephone Number Identification | 14.9% | 20.5% |
| Text Messaging - SMS | 6.6% | 16.1% |
| Velocity Checks | 16.0% | 14.6% |

Merchants show the most variation in fraud tools used. Every technique covered in the Mobile Payments & Fraud Survey is used by at least a small percentage of Merchants, while the most common tool they employ—ID Authentication—is used by only 38%. Card Associations and Issuers are more selective about the tools they use. For example, 67% of Issuers use Fraud Scoring and nearly 90% use Rules. Half of Card Associations report using AVS and Fraud Scoring. Merchants are much less likely to use these tools as only 13% of Merchants currently use AVS, 18% use Fraud Scoring and 22% use Rules.

Mobile fraud solutions in use (type)

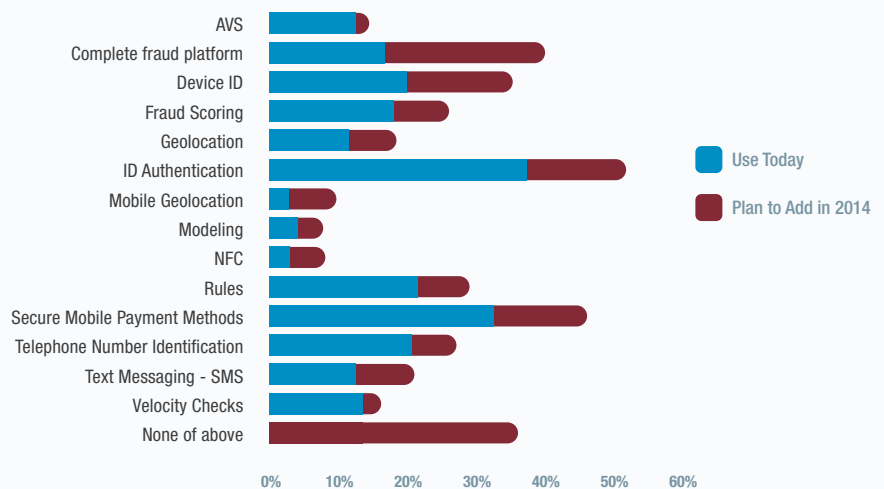


Mobile fraud solutions in use (type)



Focusing just on Merchants, we find that in 2014, 37% don't plan to add to their arsenal any of the fraud tools addressed in the Mobile Payments & Fraud Survey. Meanwhile, the tools most Merchants are planning to add are a Complete Fraud Platform (24%), Device Identification (16%) and ID Authentication (15%). The tools that Merchants are least likely to add in 2014 are AVS (2%) and Velocity Checks (3%). Although tools like NFC and Mobile Geolocation are used by only 3% of Merchants today, more Merchants plan to add these tools in 2014 than are actually using them today.

Mobile fraud solutions in use by type (merchants)



Also, the larger the Merchant, the more likely they are to use a more diverse collection of tools. Merchants with annual revenues less than \$5 million are most likely to use ID Authentication and Secure Mobile Payment Methods. In fact, these are the only tools used by at least 20% of Merchants this size. For Merchants with annual revenues greater than \$50 million, there are seven different tools used by at least 20% of Merchants. The largest Merchants are more likely to use Fraud Scoring, Geolocation, Modeling and Velocity Checks than any other group of Merchants by revenue.

| Current mobile fraud tools by \$ (merchants) | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|--|--------|----------|-----------|-----------|---------|
| AVS | 5.3% | 18.8% | 8.3% | 8.7% | 18.7% |
| Complete fraud platform | 16.0% | 0% | 8.3% | 21.7% | 20.3% |
| Device ID | 14.9% | 25.0% | 33.3% | 17.4% | 21.1% |
| Fraud Scoring | 6.4% | 25.0% | 16.7% | 21.7% | 26.0% |
| Geolocation | 4.3% | 12.5% | 4.2% | 13.0% | 17.9% |
| ID Authentication | 37.2% | 62.5% | 45.8% | 26.1% | 35.8% |
| Mobile Geolocation | 1.1% | 6.3% | 0% | 4.3% | 3.3% |
| Modeling | 0% | 0% | 4.2% | 0% | 8.1% |
| NFC | 2.1% | 0% | 8.3% | 0% | 4.1% |
| Rules | 9.6% | 18.8% | 16.7% | 34.8% | 30.1% |
| Secure Mobile Payment Methods | 33.0% | 37.5% | 41.7% | 39.1% | 29.3% |
| Telephone Number Identification | 18.1% | 31.3% | 29.2% | 30.4% | 17.9% |
| Text Messaging - SMS | 13.8% | 18.8% | 12.5% | 17.4% | 9.8% |
| Velocity Checks | 2.1% | 12.5% | 4.2% | 13.0% | 24.4% |

| Planned mobile fraud tools by \$ (merchants) | <\$5MM | \$5-10MM | \$10-25MM | \$25-50MM | >\$50MM |
|--|--------|----------|-----------|-----------|---------|
| AVS | 0% | 0% | 3.7% | 8.7% | 2.3% |
| Complete fraud platform | 34.7% | 5.9% | 22.2% | 17.4% | 19.4% |
| Device ID | 16.8% | 11.8% | 7.4% | 13.0% | 17.8% |
| Fraud Scoring | 4.0% | 5.9% | 11.1% | 13.0% | 10.1% |
| Geolocation | 5.0% | 5.9% | 7.4% | 8.7% | 8.5% |
| ID Authentication | 20.8% | 17.6% | 3.7% | 13.0% | 12.4% |
| Mobile Geolocation | 4.0% | 5.9% | 11.1% | 17.4% | 7.0% |
| Modeling | 0% | 5.9% | 0% | 4.3% | 7.0% |
| NFC | 2.0% | 5.9% | 3.7% | 13.0% | 5.4% |
| Rules | 7.9% | 0% | 0% | 17.4% | 7.8% |
| Secure Mobile Payment Methods | 20.8% | 17.6% | 3.7% | 8.7% | 11.6% |
| Telephone Number Identification | 9.9% | 0% | 7.4% | 13.0% | 3.9% |
| Text Messaging - SMS | 12.9% | 0% | 14.8% | 8.7% | 5.4% |
| Velocity Checks | 1.0% | 0% | 7.4% | 8.7% | 2.3% |
| None of above | 25.7% | 64.7% | 40.7% | 43.5% | 39.5% |

The types of fraud prevention tools Merchants use also vary by the types of goods/services they sell online. Overall, ID Authentication is the most common tool used by Merchants, with at least half of Merchants in 12 of the 24 different categories using this technology. Other tools used by a low percentage of Merchants overall are more common in certain categories. Geolocation, for example, is used by two-thirds of Dating/Social Sites and one-third of Financial Services Merchants. Further, over 80% of Dating/Social Sites employ Velocity Checks, compared to only 14% of Merchants overall using Velocity Checks.

| Current top tools for preventing mobile fraud | AVS | Complete Fraud | Device ID | Fraud Scoring | Geo-location | ID Authctn | Mobile Geo-location | Modeling | NFC | Rules | Secure Mobile | Telephone Number | Text Messaging | Velocity Checks |
|---|-------|----------------|-----------|---------------|--------------|------------|---------------------|----------|-------|-------|---------------|------------------|----------------|-----------------|
| Apparel/Accessories | 14.5% | 12.8% | 17.9% | 20.5% | 13.7% | 41.0% | 4.3% | 6.0% | 5.1% | 23.9% | 29.1% | 21.4% | 14.5% | 17.1% |
| Books/Music/Video | 14.3% | 17.1% | 11.4% | 17.1% | 5.7% | 51.4% | 0% | 2.9% | 2.9% | 8.6% | 34.3% | 17.1% | 14.3% | 8.6% |
| Computer/Electronics | 8.7% | 21.7% | 26.1% | 10.9% | 6.5% | 54.3% | 2.2% | 6.5% | 6.5% | 15.2% | 23.9% | 30.4% | 21.7% | 13.0% |
| Dating/Social Sites | 66.7% | 50.0% | 33.3% | 16.7% | 66.7% | 16.7% | 0% | 16.7% | 0% | 66.7% | 16.7% | 16.7% | 33.3% | 83.3% |
| Digital Goods | 15.4% | 19.2% | 11.5% | 19.2% | 15.4% | 61.5% | 0% | 0% | 0% | 19.2% | 38.5% | 23.1% | 19.2% | 11.5% |
| Direct Response | 16.7% | 16.7% | 0% | 0% | 16.7% | 50.0% | 0% | 16.7% | 0% | 16.7% | 33.3% | 16.7% | 33.3% | 33.3% |
| Financial Service | 33.3% | 11.1% | 33.3% | 44.4% | 33.3% | 33.3% | 11.1% | 22.2% | 22.2% | 22.2% | 22.2% | 11.1% | 0% | 33.3% |
| Flowers/Gifts | 9.5% | 14.3% | 19.0% | 9.5% | 14.3% | 52.4% | 0% | 4.8% | 0% | 38.1% | 33.3% | 19.0% | 28.6% | 9.5% |
| Food/Drug | 9.8% | 9.8% | 19.5% | 14.6% | 7.3% | 31.7% | 2.4% | 4.9% | 4.9% | 36.6% | 41.5% | 24.4% | 14.6% | 12.2% |
| Gaming | 0% | 15.4% | 7.7% | 23.1% | 0% | 46.2% | 0% | 7.7% | 7.7% | 0% | 23.1% | 15.4% | 30.8% | 7.7% |
| Hardware/Home Improvement | 5.6% | 16.7% | 27.8% | 16.7% | 8.3% | 55.6% | 0% | 2.8% | 5.6% | 16.7% | 27.8% | 19.4% | 22.2% | 5.6% |
| Health/Beauty | 8.7% | 23.9% | 19.6% | 17.4% | 10.9% | 50.0% | 2.2% | 6.5% | 0% | 26.1% | 23.9% | 21.7% | 19.6% | 10.9% |
| Housewares/Home Furnishings | 10.7% | 17.9% | 23.2% | 16.1% | 10.7% | 42.9% | 1.8% | 8.9% | 5.4% | 23.2% | 28.6% | 23.2% | 17.9% | 7.1% |
| Insurance | 0% | 0% | 0% | 0% | 0% | 100.0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Jewelry | 7.0% | 20.9% | 23.3% | 11.6% | 9.3% | 44.2% | 0% | 4.7% | 0% | 20.9% | 16.3% | 18.6% | 16.3% | 4.7% |
| Mass Merchant | 10.0% | 10.0% | 30.0% | 10.0% | 0% | 40.0% | 0% | 10.0% | 10.0% | 20.0% | 40.0% | 20.0% | 20.0% | 10.0% |
| Money Movement | 0% | 50.0% | 0% | 0% | 0% | 50.0% | 0% | 0% | 0% | 0% | 0% | 50.0% | 0% | 0% |
| Office Supplies | 9.5% | 4.8% | 19.0% | 23.8% | 9.5% | 52.4% | 0% | 9.5% | 4.8% | 28.6% | 42.9% | 19.0% | 23.8% | 9.5% |
| Other Services | 16.2% | 13.5% | 24.3% | 13.5% | 10.8% | 51.4% | 0% | 2.7% | 2.7% | 21.6% | 29.7% | 18.9% | 18.9% | 16.2% |
| Specialty/Non-Apparel | 6.7% | 17.8% | 20.0% | 6.7% | 8.9% | 42.2% | 2.2% | 2.2% | 0% | 15.6% | 44.4% | 24.4% | 11.1% | 4.4% |
| Sporting Goods | 20.0% | 13.3% | 30.0% | 20.0% | 13.3% | 43.3% | 6.7% | 6.7% | 0% | 26.7% | 26.7% | 23.3% | 33.3% | 20.0% |
| Telecom | 6.3% | 31.3% | 12.5% | 25.0% | 6.3% | 37.5% | 0% | 6.3% | 0% | 12.5% | 12.5% | 18.8% | 6.3% | 18.8% |
| Toys/Hobbies | 12.1% | 12.1% | 21.2% | 9.1% | 9.1% | 33.3% | 3.0% | 9.1% | 0% | 12.1% | 45.5% | 21.2% | 21.2% | 12.1% |
| Travel | 8.3% | 0% | 33.3% | 25.0% | 16.7% | 58.3% | 8.3% | 8.3% | 0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |

There is also some variation in the types of tools that Merchants plan to add in 2014 based on the types of goods/services they sell online. While only 8% of Merchants overall plan to add Fraud Scoring in 2014, this addition is planned by 24% of Merchants that sell Office Supplies. Additionally, only 7% of Merchants overall plan on adding Geolocation in 2014, compared to 22% of Financial Services Merchants.

| Planned top tools for preventing mobile fraud | AVS | Complete Fraud | Device ID | Fraud Scoring | Geo-location | ID Authctn | Mobile Geo-location | Modeling | NFC | Rules | Secure Mobile | Telephone Number | Text Messaging | Velocity Checks | None of Above |
|---|-------|----------------|-----------|---------------|--------------|------------|---------------------|----------|-------|-------|---------------|------------------|----------------|-----------------|---------------|
| Apparel/Accessories | 2.4% | 23.4% | 20.2% | 9.7% | 11.3% | 21.8% | 8.9% | 4.0% | 6.5% | 8.9% | 12.1% | 4.8% | 10.5% | 2.4% | 34.7% |
| Books/Music/Video | 2.8% | 33.3% | 19.4% | 8.3% | 2.8% | 19.4% | 8.3% | 0% | 2.8% | 5.6% | 19.4% | 8.3% | 11.1% | 2.8% | 30.6% |
| Computer/Electronics | 4.2% | 25.0% | 18.8% | 8.3% | 6.3% | 14.6% | 12.5% | 0% | 2.1% | 4.2% | 10.4% | 2.1% | 8.3% | 6.3% | 39.6% |
| Dating/Social Sites | 0% | 33.3% | 33.3% | 16.7% | 16.7% | 16.7% | 16.7% | 33.3% | 0% | 16.7% | 0% | 16.7% | 16.7% | 16.7% | 16.7% |
| Digital Goods | 0% | 25.9% | 3.7% | 7.4% | 7.4% | 7.4% | 11.1% | 3.7% | 3.7% | 0% | 18.5% | 0% | 11.1% | 3.7% | 29.6% |
| Direct Response | 0% | 50.0% | 16.7% | 16.7% | 16.7% | 16.7% | 0% | 33.3% | 16.7% | 16.7% | 0% | 0% | 16.7% | 0% | 16.7% |
| Financial Service | 0% | 22.2% | 33.3% | 0% | 22.2% | 22.2% | 11.1% | 11.1% | 0% | 11.1% | 0% | 22.2% | 11.1% | 0% | 22.2% |
| Flowers/Gifts | 4.8% | 42.9% | 9.5% | 4.8% | 14.3% | 28.6% | 9.5% | 4.8% | 14.3% | 4.8% | 23.8% | 4.8% | 9.5% | 14.3% | 4.8% |
| Food/Drug | 2.4% | 22.0% | 17.1% | 0% | 0% | 19.5% | 0% | 2.4% | 9.8% | 9.8% | 24.4% | 9.8% | 9.8% | 0% | 31.7% |
| Gaming | 0% | 28.6% | 7.1% | 7.1% | 7.1% | 7.1% | 7.1% | 0% | 0% | 0% | 7.1% | 0% | 7.1% | 0% | 42.9% |
| Hardware/Home Improvement | 2.7% | 24.3% | 5.4% | 5.4% | 2.7% | 13.5% | 5.4% | 2.7% | 5.4% | 2.7% | 18.9% | 2.7% | 10.8% | 5.4% | 40.5% |
| Health/Beauty | 2.0% | 24.0% | 20.0% | 10.0% | 10.0% | 20.0% | 4.0% | 4.0% | 4.0% | 6.0% | 6.0% | 4.0% | 4.0% | 6.0% | 38.0% |
| Housewares/Home Furnishings | 3.4% | 28.8% | 16.9% | 11.9% | 8.5% | 23.7% | 8.5% | 5.1% | 5.1% | 8.5% | 22.0% | 6.8% | 8.5% | 3.4% | 27.1% |
| Insurance | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100.0% |
| Jewelry | 4.3% | 26.1% | 10.9% | 6.5% | 10.9% | 21.7% | 10.9% | 2.2% | 2.2% | 6.5% | 13.0% | 4.3% | 6.5% | 6.5% | 28.3% |
| Mass Merchant | 10.0% | 40.0% | 30.0% | 10.0% | 20.0% | 20.0% | 10.0% | 10.0% | 10.0% | 10.0% | 10.0% | 10.0% | 10.0% | 0% | 0% |
| Money Movement | 0% | 0% | 50.0% | 0% | 0% | 50.0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 50.0% |
| Office Supplies | 0% | 38.1% | 4.8% | 23.8% | 4.8% | 23.8% | 9.5% | 4.8% | 9.5% | 4.8% | 19.0% | 4.8% | 4.8% | 4.8% | 14.3% |
| Other Services | 2.6% | 23.7% | 13.2% | 15.8% | 7.9% | 10.5% | 15.8% | 10.5% | 2.6% | 10.5% | 15.8% | 7.9% | 7.9% | 7.9% | 26.3% |
| Specialty/Non-Apparel | 0% | 48.9% | 12.8% | 8.5% | 8.5% | 17.0% | 6.4% | 0% | 4.3% | 6.4% | 27.7% | 10.6% | 19.1% | 2.1% | 19.1% |
| Sporting Goods | 0% | 25.0% | 15.6% | 12.5% | 15.6% | 18.8% | 6.3% | 3.1% | 3.1% | 6.3% | 15.6% | 6.3% | 6.3% | 6.3% | 46.9% |
| Telecom | 0% | 16.7% | 0% | 5.6% | 0% | 5.6% | 5.6% | 0% | 5.6% | 5.6% | 5.6% | 5.6% | 11.1% | 0% | 44.4% |
| Toys/Hobbies | 6.1% | 27.3% | 18.2% | 6.1% | 6.1% | 21.2% | 12.1% | 0% | 6.1% | 3.0% | 18.2% | 3.0% | 9.1% | 6.1% | 21.2% |
| Travel | 0% | 30.8% | 7.7% | 7.7% | 7.7% | 15.4% | 7.7% | 7.7% | 0% | 7.7% | 7.7% | 7.7% | 7.7% | 0% | 61.5% |



Conclusion

Based on the results in the Mobile Payments & Fraud Survey: 2014 Report, we see that the mobile channel is still young, but it is quickly growing, both as a larger portion of an organization's revenue and as a more integral component of an organization's growth plans. As the mobile channel grows, we are starting to see shifts in the perceptions of organizations, including priorities for current and planned capabilities, as well as what they see as the biggest obstacles to adoption of mobile eCommerce. Some key findings from this year's report include:

- The mobile channel is growing in importance and revenue. Comparing this year's findings to those from last year, we see that more organizations are actively supporting the mobile channel, mobile has become more important to organizations' growth plans and the mobile channel represents a higher portion of an organization's total business.
- Organizations are more likely to view the mobile channel as riskier than last year and more Merchants are coming to the conclusion that the mobile channel requires specialized tools.
- While organizations still consider difficulty of mobile transactions as the biggest obstacle to mobile adoption, they are also more likely to consider consumer security concerns or their ability to manage fraud risk as significant obstacles.
- Support for the mobile channel has grown for both online and in-store mobile implementations. Some of the most remarkable growth from last year to this year is in the portion of Merchants that support mobile apps, mobile websites and mobile payments. The share of Merchants that offer a mobile app for online shopping more than doubled from 21% to 54%, while nearly half of Merchants now offer a dedicated mobile website. The growth in support for the mobile channel with respect to brick-and-mortar is even more noteworthy. The number of Merchants that support mobile payments at the point-of-sale nearly doubled from 15% last year to 29% this year, while the percentage of Merchants that offer mobile apps for in-store shopping more than quadrupled.
- Organizations put a greater emphasis on the importance of being able to detect when online transactions come from a mobile device, but the number of Merchants that are actually able to do this increased by only five percentage points. Larger Merchants are much more likely to have this capability than smaller Merchants.

Mobile Payments & Fraud Survey: 2014 Report



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